

AD-A060 998

NAVAL WEATHER SERVICE DETACHMENT / SHEVILLE N C
SUMMARY OF METEOROLOGICAL OBSERVATIONS, SURFACE (SMOS), ALAMEDA--ETC (U)
JUN 78

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UNCLASSIFIED

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1 OF 4

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Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM																		
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER																		
4. TITLE (and Subtitle) Summary of Meteorological Observations, Surface (SMOS) Alameda, CA		5. TYPE OF REPORT & PERIOD COVERED Reference report 1945-1977																		
7. AUTHOR(s) N/A		6. PERFORMING ORG. REPORT NUMBER																		
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Weather Service Detachment Federal Building Asheville, N. C. 28801		8. CONTRACT OR GRANT NUMBER(s)																		
11. CONTROLLING OFFICE NAME AND ADDRESS Director, Naval Oceanography and Meteorology National Space Technology Laboratories NSTL Station, MS 39529		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS																		
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE June 1978																		
		13. NUMBER OF PAGES 358																		
		15. SECURITY CLASS. (of this report) Unclassified																		
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE																		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		<table border="1"> <tr> <td colspan="2">ACCESSION for</td> </tr> <tr> <td>NTIS</td> <td>White Section <input checked="" type="checkbox"/></td> </tr> <tr> <td>DDC</td> <td>Bull Section <input type="checkbox"/></td> </tr> <tr> <td>UNANNOUNCED</td> <td><input type="checkbox"/></td> </tr> <tr> <td colspan="2">JUSTIFICATION</td> </tr> <tr> <td colspan="2">BY</td> </tr> <tr> <td colspan="2">DISTRIBUTION/AVAILABILITY CODES</td> </tr> <tr> <td>Dist.</td> <td>Avail and/or SPECIAL</td> </tr> <tr> <td colspan="2">A</td> </tr> </table>	ACCESSION for		NTIS	White Section <input checked="" type="checkbox"/>	DDC	Bull Section <input type="checkbox"/>	UNANNOUNCED	<input type="checkbox"/>	JUSTIFICATION		BY		DISTRIBUTION/AVAILABILITY CODES		Dist.	Avail and/or SPECIAL	A	
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18. SUPPLEMENTARY NOTES																				
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Climatology, surface wind, temperature, precipitation, ceiling, visibility, relative humidity, station pressure, extreme temperatures, sea level pressure, daily temperature, weather conditions, monthly climatology, Naval shore facility, coastal region, snow depth, cloud cover, Alameda, CA.																				
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This data report consists of a six part statistical summary of surface weather observations. The six parts are: Part A - Weather Conditions/Atmospheric Phenomena, Part B - Precipitation/Snowfall/Snow Depth, Part C - Surface Winds, Part D - Ceiling versus Visibility/Sky Cover, Part E - Psychrometric Summaries, Part F - Station Pressure/Sea Level Pressure																				

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1 JAN 73EDITION OF 1 NOV 65 IS OBSOLETE
S/N 0102- LF-014-6601Unclassified
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

STATION NO. OR SUMMARY: 23239	STATION NAME: Alameda, California	LATITUDE: 37°44'N	LONGITUDE: 122°19'W	STATION ELEV. (FT.): 15	CALL SIGN: KNGZ	WMO NUMBER: 74506
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STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FEET	TYPE BAROMETER	
1.	Weather office (Ops Bldg)	Navy		1958	37°44'N	122°19'W	28.7	mercurial	24
2.	Weather office (replacement) (Ops Bldg)	"	1958	1961	"	"	27.5	"	24
3.	Weather office (Ops Bldg)	"	1961	1966	"	"	30.7	"	24
4.	Weather Office, Bldg 19, room 205	"	1966	1967	"	"	30.7	"	24
5.	North bulkhead, OOW office, Bldg 19	"	1967	1974	"	"	32.7	"	24
1a.	AN/GMQ-14A console, Bldg 19, Rm 205	"	1959	1967	"	"		aneroid	
2a.	AN/GMQ-14A console, OOW office, Bldg 19	"	1967	1977	"	"	30.3		24
1b.	Weather office, Bldg 19	"	1959		"	"	34.3	aneroid	24

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE	
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER		
1.		Atop operations control tower	selsyn	triple	70'	1. Barograph
2.	Installed 1953	Atop operations control tower	AN/UMQ-50	RD-108	70'	2. Semi-auto Met. station (AN/GMQ-29)
3.		FLEVEACEN storage spaces	AN/PMQ-3			3. Ceiling light (ML-121)
4.	Relocated 1970	Approach end runway 31	AN/UMQ-50	RD-108B	15'	4. Cloud height set (AN/GMQ-13D)
5.	Relocated 1974	Weather office, Bldg 19	AN/PMQ-3	RD-108B	15'	5. Transmissometer (AN/GMQ-10C)

SUMMARY OF METEOROLOGICAL OBSERVATIONS, SURFACE

DIRNAVOCEANMET ltr 3146 Ser 1032 dated 26 August 1977 (NOTAL) established the following policy for SMOS production and updating:

1. Ten years of data will be used as the standard period of record (POR).
2. All available data will be used for extreme values.
3. Summarize (update) every five years.
 - a. Summarize the five year period (1973-1977) for all sections of the SMOS except extremes. The 5 year summary will be an intermediate SMOS to show secular trends. All available data through 1977 will be included for extreme values.
 - b. The update in 1983 will include the POR 1973 through 1982, with all available data through 1982 for extreme values.
 - c. The update in 1988 will be an intermediate SMOS (POR 1983-1987). All available data through 1987 will be included for extreme values.
 - d. In 1993 the POR will be 1983 through 1992. All available data through 1992 will be used for extreme values.

Each standard POR (10 years) summary should be retained by individual stations along with the SMOS prepared in 1973. The retention of these summaries will provide the most comprehensive climatological file for your station.

DESCRIPTION: Preceding each section is a brief description of the data comprising each part of the summary and the manner of presentation. Tabulations are prepared from 3-hourly and daily observations recorded by stations operated by the U.S. Navy and U.S. Marine Corps. 3-hourly observations are defined as these record or record-special observations recorded at scheduled 3-hourly intervals. Daily observations are selected from all data recorded on reporting forms and combined into Summary of the Day observations (prepared from record-special, local, summary of the day, remarks, etc.).

COMMENT: All observations summarized in this tabulation have been computer edited for consistency and reasonableness prior to, or during, the processing stage. Efforts to improve the quality of the data after summarization are expensive, i.e., the improvement might consist of the elimination of one suspect or erroneous value. The cost of preparing "perfect" copy can be prohibitive due to the handwork involved. Suspect cases will occur infrequently, but users should not disregard extreme values completely as some could be valid. Questionable values will most likely be single occurrences shown by a percentage frequency of ".0". (This value indicates a percent less than ".05," which, in most cases, reflects a single observation.) Since most stations summarized now have in excess of 10,000 3-hourly observations, the occurrence of an occasional spurious value should not in itself be considered significant. Every effort is made by this office to maintain a high degree of accuracy and reliability in these tables, and the Naval Weather Service Detachment (NWS), Asheville, N. C. welcomes your comment and criticisms.

PART A

WEATHER CONDITIONS

This summary is a percentage frequency occurrence of various atmospheric phenomena and obstructions to vision, derived from 3-hourly observations, and is presented in three tables as follows:

1. By month and annual, all hours and years combined.
 2. By month and annual, all hours and years combined, by wind direction.
 3. By month, all years combined, by standard 3-hour groups.
- Occurrences of the various phenomena included in each category on the forms are listed below:

Thunderstorms - All reported occurrences of thunderstorm, tornado, and waterspout.

Rain and/or drizzle - All liquid precipitation, falling to the ground, not freezing.

Freezing rain and/or freezing drizzle (glaze) - Precipitation falling in liquid form, but freezing on contact with an unheated surface.

Snow and/or sleet - Included are snow, sleet, snow pellets (soft hail), snow grains, and ice crystals.

Hail Occurrences of hail and small hail are included.

Percentage of observations with precipitation - Included in this category are the observations when one or more of the above phenomena occurred. Since more than one type of precipitation may be reported in the same observation, the sums of the individual categories may exceed the total columns.

Fog - Included are fog, ice fog, and ground fog.

Smoke and/or haze - Occurrences of smoke, haze, or combinations of smoke and haze are included.

Blowing snow - Occurrences of blowing snow (also drifting snow when reported from non-WBAN sources.)

Dust and/or sand - Included are blowing dust, blowing sand, and dust.

Blowing spray - This item if reported, is not shown in a separate category on this form but is included in the computation Percentage of Observations with Obstructions to Vision.

Percentage of observations with obstructions to vision - Included in this category are the observations when one or more of the above obstructions to vision occurred. Since more than one type of obstruction may be reported in the same observation, the sums of the individual categories may exceed the percentage total columns. Also, although precipitation may reduce visibility, it is not considered an obstruction to vision for purposes of this summary; therefore, the percentage total of obstructions to vision need not reflect the total observations with reduced visibility.

NOTE: The total number of observations may vary among tables within the same month and period. Percentages may not always equal 100.0 due to rounding practices.

PART A

ATMOSPHERIC PHENOMENA

This summary is a presentation of the percentage of days with occurrences of various atmospheric phenomena. These data are obtained from all recorded information on the reporting forms and combined into a daily observation.

The descriptions of the phenomena in the Weather Conditions Summary above also apply for the categories summarized in these tabulations. However, it should be noted that in this summary the columns headed "% OF OBS WITH PRECIP" and "% OF OBS WITH OBST TO VISION" show the percentage of days rather than percentage of observations. Since more than one type of precipitation or more than one type of obstruction may occur in the same daily observation, the sum of the values in the individual columns may not equal the total columns.

This presentation is by month with annual totals, and is prepared with all years combined.

NOTE: A day with rain and/or drizzle was not separately reported in WBAN data prior to January 1949. Therefore percentages in this column are restricted to the period January 1949 and later.

A day with dust and/or sand was punched and included in this summary only when visibility was less than $5/8$ mile.

Percentage Frequency of Wind Direction vs. Weather Conditions - This tabulation is derived from 3-hourly observations and is presented by month and annual, all hours and years combined. The main body of the Summary consists of weather conditions (horizontally) and wind directions (vertically) to 16 compass points (plus calm). Column totals show the number of observations. "% Total" indicates percentage frequency of occurrences.

WEATHER CONDITIONS

5701 WEATHER CONDITIONS JAN 1988

23239 STATION ALAMEDA, CALIFORNIA 73-77 YEARS JAN MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER-STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN	01		5.8				5.8	16.1	19.4			29.7	155
	04		9.0				9.0	22.6	18.1			34.8	155
	07		7.7				7.7	25.8	22.6			40.0	155
	10		7.7				7.7	18.1	36.1			48.4	155
	13		6.5				6.5	11.6	39.4			45.8	155
	16	1.3	7.1		.6		7.1	5.2	32.3			37.4	155
	19		7.7				7.7	3.2	12.9			16.1	155
	22		9.0				9.0	5.8	13.5			19.4	155
TOTALS		2	7.6		.1		7.6	13.6	24.3			34.0	1240

NAVWEASERVCOM

WEATHER CONDITIONS

FEB
MONTH73-77
YEARSALAMEDA, CALIFORNIA
STATION NAME23239
STATIONPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
FEB	01		5.7				5.7	5.7	2.8			7.1	141
	04		7.8		.7		8.5	14.9	5.0			16.3	141
	07		12.1				12.1	22.0	11.3			27.0	141
	10		7.8				7.8	19.9	18.4			33.3	141
	13		10.6				10.6	9.9	25.5			31.9	141
	16		10.6				10.6	7.8	15.6			22.0	141
	19		11.3				11.3	5.7	5.7			9.2	141
	22		7.8				7.8	5.7	4.3			8.5	141
TOTALS			9.2		.1		9.3	11.5	11.1			19.4	1128

WEATHER CONDITIONS

23239
STATIONALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

MAR
MONTHPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
MAR	01		10,3				10,3	1,3	,6			1,9	155
	04		10,3				10,3	1,9	,6			2,6	155
	07		11,6				11,6	7,1	1,9			7,7	155
	10		8,4		,6		8,4	4,5	6,5			9,7	155
	13		6,5				6,5	4,5	3,2			7,7	155
	16		8,4				8,4	3,2	,6			3,9	155
	19		11,6				11,6	3,2				3,2	155
	22		12,3			,6	12,3	1,3				1,3	155
TOTALS			9,9		,1	,1	9,9	3,4	1,7			4,8	1240

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WEATHER CONDITIONS

APR
MONTH

73-77

YEARS

ALAMEDA, CALIFORNIA
STATION NAME23239
STATIONPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
APR	01		4,7				4,7	,7	,7			,7	150
	04		3,3				3,3	,7	,7			1,3	150
	07		6,7				6,7	5,3	4,0			8,7	150
	10		3,3				3,3	2,0	3,3			5,3	150
	13		5,3				5,3	1,3	1,3			2,7	150
	16		4,0				4,0	,7	,7			1,3	150
	19		2,0				2,0	1,3	2,0			2,7	150
	22		2,7				2,7	1,3	,7			1,3	150
TOTALS			4,0				4,0	1,7	1,7			3,0	1200

WEATHER CONDITIONS

MAY
MONTH

73-77

ALAMEDA, CALIFORNIA
STATION NAME23239
STATION

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
MAY	01		1,3				1,3	1,3	1,3			2,6	154
	04		1,3				1,3	,6	1,9			1,9	155
	07		3,2				3,2	2,6	5,2			7,7	155
	10		2,6				2,6	1,9	3,2			4,5	155
	13		1,3				1,3		1,9			1,9	155
	16		1,9				1,9		1,3			1,3	155
	19		1,3				1,3	2,6	3,2			5,8	155
	22		,6				,6	,6	1,3			1,9	155
TOTALS			1,7				1,7	1,2	2,4			3,5	1239

WEATHER CONDITIONS

JUN
MONTH73-77
YEARSALAMEDA, CALIFORNIA
STATION NAME23239
STATIONPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JUN	01		2,7				2,7	4,0	,7			4,7	150
	04		6,0				6,0	4,0				4,0	150
	07		3,3				3,3	9,3	5,3			14,7	150
	10	,7	2,7				2,7	,7	7,3			8,0	150
	13								5,3			5,3	150
	16								1,3			1,3	150
	19							2,0	4,0			5,3	150
	22		,7				,7	2,0	1,3			3,3	150
TOTALS		,1	1,9				1,9	2,8	3,2			5,8	1200

WEATHER CONDITIONS

JUL
MONTH

73-77

YEARS

ALAMEDA, CALIFORNIA
STATION NAME23239
STATIONPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JUL	01		5.8				5.8	6.5	1.9			8.4	155
	04		6.5				6.5	12.3	1.3			13.5	155
	07		7.7				7.7	13.5	7.1			19.4	155
	10		1.9				1.9	4.5	4.5			8.4	155
	13		.6				.6	1.3	1.9			1.9	155
	16								2.6			2.6	155
	19							1.3	5.2			5.8	155
	22		1.9				1.9	2.6	2.6			4.5	155
TOTALS			3.1				3.1	5.3	3.4			8.1	1240

WEATHER CONDITIONS

AUG
MONTH

73-77

YEARS

ALAMEDA, CALIFORNIA
STATION NAME23239
STATIONPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
AUG	01	.6	9.7				9.7	8.4	1.3			9.0	155
	04		7.1				7.1	12.9	1.9			13.5	155
	07	.6	6.5				6.5	15.5	5.2			18.1	155
	10	.6	3.9				3.9	4.5	3.2			7.1	155
	13	.6	.6				.6		2.6			2.6	155
	16	.6	1.3				1.3	.6	3.2			3.9	155
	19	.6	3.2				3.2	4.5	3.2			7.7	155
	22		5.2				5.2	3.9	.6			4.5	155
TOTALS		.5	4.7				4.7	6.3	2.7			8.3	1240

WEATHER CONDITIONS

SEP
MONTH

73-77

YEARS

23239 ALAMEDA, CALIFORNIA
STATION NAME

STATION

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
SEP	01		4,0				4,0	5,3				5,3	150
	04		6,0				6,0	8,0	7			8,0	150
	07		4,0				4,0	20,0	6,0			24,0	150
	10		4,7				4,7	8,0	8,7			15,3	150
	13		2,7				2,7	1,3	12,0			12,7	150
	16		2,0				2,0	1,3	7,3			8,7	150
	19		4,0				4,0	6,0	2,7			8,0	150
	22		1,3				1,3	5,3	1,3			6,7	150
TOTALS			3,6				3,6	6,9	4,8			11,1	1200

WEATHER CONDITIONS

UCT
MONTH73-77
YEARSALAMEDA, CALIFORNIA
STATION NAME23239
STATIONPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
OCT	01		1,9				1,9	1,9	1,9			3,2	155
	04		5,2				5,2	5,2	1,9			6,5	155
	07		5,2				5,2	12,9	12,9			25,2	155
	10		2,6				2,6	7,7	29,7			36,1	155
	13	,6	3,2				3,2	2,6	22,6			25,2	155
	16		1,3				1,3		13,5			13,5	155
	19		5,2				5,2	1,3	3,2			3,9	155
	22		5,8				5,8	3,2	1,9			3,9	155
TOTALS		,1	3,8				3,8	4,4	11,0			14,7	1240

WEATHER CONDITIONS

NOV
MONTH

73-77

YEARS

23239 ALAMEDA, CALIFORNIA
STATION NAMEPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
NOV	01		6.0				6.0	14.0	13.3			18.7	150
	04		7.3				7.3	11.3	12.7			18.7	150
	07		6.7				6.7	24.0	18.7			33.3	150
	10		6.0				6.0	16.0	30.0			37.3	150
	13		8.0				8.0	8.7	27.3			31.3	150
	16		5.3				5.3	4.0	21.3			23.3	150
	19		8.0				8.0	2.7	10.7			12.0	150
	22		8.7				8.7	7.3	12.0			16.0	150
TOTALS			7.0				7.0	11.0	16.3			23.6	1200

WEATHER CONDITIONS

DEC
MONTH

73-77

YEARS

ALAMEDA, CALIFORNIA
STATION NAME23239
STATIONPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
DEC	01	.6	5.2				5.2	25.2	21.9		.6	43.2	155
	04	.6	5.2				5.2	27.1	23.9		.6	46.5	155
	07	.6	9.7				9.7	32.3	24.5			51.6	155
	10	.6	5.8				5.8	29.7	33.5			57.4	155
	13		8.4				8.4	18.1	44.5			54.8	155
	16		8.4				8.4	11.6	40.0			49.0	155
	19		6.5				6.5	9.7	17.4		.6	27.1	155
	22		6.5				6.5	19.4	18.1		.6	34.2	155
TOTALS		.3	7.0				7.0	21.6	28.0		.3	45.5	1240

WEATHER CONDITIONS

23239 STATION

ALAMEDA, CALIFORNIA

73-77

YEARS

ALL MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN	ALL	.2	7.6		.1		7.6	13.6	24.3			34.0	1240
FEB			9.2		.1		9.3	11.5	11.1			19.4	1128
MAR			9.9		.1	.1	9.9	3.4	1.7			4.8	1240
APR			4.0				4.0	1.7	1.7			3.0	1200
MAY			1.7				1.7	1.2	2.4			3.5	1239
JUN	.1		1.9				1.9	2.8	3.2			5.8	1200
JUL			3.1				3.1	5.3	3.4			8.1	1240
AUG	.5		4.7				4.7	6.3	2.7			8.3	1240
SEP			3.6				3.6	6.9	4.8			11.1	1200
OCT	.1		3.8				3.8	4.4	11.0			14.7	1240
NOV			7.0				7.0	11.0	18.3			23.8	1200
DEC	.3		7.0				7.0	21.6	28.0		.3	45.5	1240
TOTALS		.1	5.3		.0	.0	5.3	7.5	9.4		.0	15.2	14607

WEATHER CONDITIONS

ATMOSPHERIC PHENOMENA

ALL
MONTH

49-77

YEARS

23239 ALAMEDA, CALIFORNIA
STATION NAME

PERCENTAGE OF DAYS WITH VARIOUS ATMOSPHERIC PHENOMENA FROM DAILY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN	DAILY	1.0	42.6		.7	1.0	42.7	45.2	57.1			68.6	899
FEB		1.2	40.3		.5	.4	40.4	36.3	46.0			54.7	819
MAR		.7	39.8		.3	.9	39.8	16.2	26.8			34.1	899
APR		2.0	28.2			1.3	28.2	9.5	25.7			29.3	870
MAY		.6	21.7				21.7	10.9	28.4			32.8	899
JUN		.3	19.0				19.0	12.2	25.1			32.2	870
JUL		.7	21.2				21.2	22.8	37.6			47.8	899
AUG		.9	25.7				25.7	25.1	37.5			48.2	899
SEP		.5	17.9				17.9	21.6	47.7			54.8	870
OCT		.7	21.6			.1	21.6	28.0	56.4			63.2	899
NOV		.3	33.0		.1	.5	33.0	40.6	57.7			67.5	870
DEC		.9	39.7		.6	.6	39.7	48.9	55.4			70.3	899
TOTALS		.8	29.2		.2	.4	29.2	26.4	41.8			50.3	10592

PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

STATION 23239 ALAMEDA, CALIFORNIA STATION NAME JAN 1973-DEC 1977 YEARS MONTH JANUARY ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET "SHOWERS ICE CRYSTALS	SNOW "GRAINS "PELLETS "SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	0.3								5.3	10.4	34.4			56.8
NNE	8.1		2.7						16.2	8.1	35.1			45.9
NE	13.6	4.3							9.1		13.6			54.5
ENE	12.0	4.0							8.0		4.0			80.0
E	6.8		2.3						13.6		11.4			72.7
ESE	17.8					1.4			11.0	6.8	11.0			57.3
SE	24.3	2.7							12.2	4.1	3.4			59.3
SSE	11.9	4.3	3.0						14.9	4.3	17.9			53.7
S	10.9	1.6							10.9	4.7	12.3			59.4
SSW	3.7							9.3	3.7	2.9	14.3			77.1
SW	4.8	14.3	9.3						9.3	4.8	19.0			47.6
WSW	8.3								13.9	2.8	8.3			75.0
W	1.8		3.3						8.8	3.3	17.3			66.7
WNW	1.9									3.8	17.3			80.8
NW		.9							3.4		20.7			63.8
NNW	2.1								3.4	8.3	26.9			51.7
VARIABLE														
CALM	1.1	1.3	1.3						10.1	3.8	14.3			67.7
TOTAL	72	13	9			1		2	102	66	238			766
% TOTAL	5.8	1.0	.7			.1		.2	8.2	5.3	19.2			61.8

TOTAL NUMBER OF OBSERVATIONS 1,240

PERCENTAGE FREQUENCY OF WIND DIRECTION
VS. WEATHER CONDITIONS

23239

ALAMEDA, CALIFORNIA

JAN 1973-DEC 1977

FEBRUARY

ALL

STATION

STATION NAME

YEARS

MONTH

HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET "SHOWERS ICE CRYSTALS	SNOW "GRAINS "PELLETS "SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N									2.9	7.6	15.2			74.3
NNE										13.3	13.3			76.7
NE									11.1	5.6	5.6			77.8
ENE	8.3					8.3								83.3
E	16.7	13.3							6.7	13.3	16.7			50.0
ESE	12.9	5.7	2.9						12.9	2.9	1.4			71.4
SE	16.4	6.6							6.6	3.3	6.6			67.2
SSE	16.1	3.6	3.6						10.7		3.6			66.1
S	9.9	6.3	3.6						10.8	3.6	8.1			62.2
SSW	7.7	5.1	2.6						10.3	2.6	10.3			71.8
SW	7.1								10.7	3.6	3.6			64.3
WSW	6.5								8.7		10.9			78.3
W	1.7	2.1	2.1						9.3	.7	8.6			76.4
WNW	1.3	1.3							3.1	3.8	9.0			84.6
NW	1.3								1.3	3.1	3.1			85.9
NNW	1.1	2.2	1.1						4.3	5.4	8.6			77.4
VARIABLE														
CALM	1.8								8.0	4.3	4.3			76.7
TOTAL	62	29	13			1			83	46	89			833
% TOTAL	5.5	2.6	1.2			.1			7.4	4.1	7.9			73.8

TOTAL NUMBER OF OBSERVATIONS

1,128

PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

STATION 23239 ALAMEDA, CALIFORNIA JAN 1973-DEC 1977 MONTH MARCH ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET "SHOWERS ICE CRYSTALS	SNOW "GRAINS "PELLETS "SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	1.3													97.4
NNE	5.7	2.9	2.9						2.9					88.6
NE									10.0					90.0
ENE	7.1	7.1							7.1		14.3			71.4
E	10.8	2.7												86.5
ESE	25.0	7.5							10.0	5.0	2.5			62.5
SE	19.6	13.0	4.3						6.5					63.0
SSE	25.9	5.2	1.7						8.6		5.2			62.1
S	14.0	9.7	1.1						5.4					74.2
SSW	7.8	3.9	3.9						7.8					78.4
SW	6.3		2.1						4.2					89.6
WSW	3.8	2.5												92.4
W	3.1	1.2	.4					.4	1.2					94.9
WNW	1.5		.7								.7			97.0
NW		1.0							1.0	1.0	3.1			92.9
NNW	2.2	1.1	1.1			1.1			2.2		1.1			92.3
VARIABLE														
CALM	2.9								7.1	2.9	1.4			88.6
TOTAL	79	33	11			1	1	1	37	5	14			1085
% TOTAL	6.4	2.7	.9			.1	.1	.1	3.0	.4	1.1			87.5

TOTAL NUMBER OF OBSERVATIONS 1,240

PERCENTAGE FREQUENCY OF WIND DIRECTION
VS. WEATHER CONDITIONS

23239 STATION NAME ALAMEDA, CALIFORNIA JAN 1973-DEC 1977 YEARS MONTH APRIL ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET " SHOWERS ICE CRYSTALS	SNOW " GRAINS " PELLETS " SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N		1.6									1.6			95.2
NNE														100.0
NE														100.0
ENE														100.0
E														100.0
ESE	4.3		4.3						4.3					91.3
SE	4.8													90.5
SSE	9.4	3.1							3.1					84.4
S	5.6	8.3							1.4					81.9
SSW	6.9	3.6	1.8						1.8					82.1
SW	7.6	1.3							3.0					87.9
WSW	1.3	2.2							4.3					90.3
W	.6	1.2	.6						1.2	.3				96.6
WNW									.7					99.3
NW		2.3							3.3		2.3			95.3
NNW														100.0
VARIABLE														
CALM	1.2										2.4			96.3
TOTAL	24	20	4						19	1	11			1125
% TOTAL	2.0	1.7	.3						1.6	.1	.9			93.8

TOTAL NUMBER OF OBSERVATIONS 1,200

PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

STATION 23239 ALAMEDA, CALIFORNIA JAN 1973-DEC 1977 MONTH MAY ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET "SHOWERS ICE CRYSTALS	SNOW "GRAINS "PELLETS "SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N														100.0
NNE														87.5
NE														100.0
ENE														100.0
E														100.0
ESE														100.0
SE														93.8
SSE	9.1		4.5						4.5					86.4
S	3.6		1.8						3.6		1.8			91.1
SSW			4.0						2.0		4.0			90.0
SW	.9	.9									3.6			93.6
WSW	.5	.5	1.0						2.0		3.5			92.0
W	.4	.2	.7						1.1		.4			97.1
WNW											.8			99.2
NW	1.9								1.9					96.2
NNW														100.0
VARIABLE														
CALM									1.4		2.9			96.2
TOTAL	9	3	9						15		19			1181
% TOTAL	.7	.2	.7						1.2		1.5			95.3

TOTAL NUMBER OF OBSERVATIONS 1,239

PERCENTAGE FREQUENCY OF WIND DIRECTION
VS. WEATHER CONDITIONS

23239 STATION NAME ALAMEDA, CALIFORNIA JAN 1973-DEC 1977 YEARS MONTH JUNE ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET "SHOWERS ICE CRYSTALS	SNOW "GRAINS "PELLETS "SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N														100.0
NNE														100.0
NE														100.0
ENE														100.0
E														100.0
ESE														100.0
SE														100.0
SSE														100.0
S			3.4					2.2	8.7					96.6
SSW		2.2	6.5						4.9	1.0	2.2			87.0
SW			1.0								3.9			90.3
WSW	.4		2.8						2.4		4.8			90.1
W	.2		1.6						2.7		1.3			94.4
WNW			.8						2.5		3.4			91.3
NW											8.6			89.7
NNW														100.0
VARIABLE														
CALM									1.0					97.0
TOTAL	2	1	20						32	1	32			1115
% TOTAL	.2	.1	1.7					.1	2.7	.1	2.7			92.9

TOTAL NUMBER OF OBSERVATIONS 1,200

PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

STATION 23239 ALAMEDA, CALIFORNIA JAN 1973-DEC 1977 MONTH JULY ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET "SHOWERS ICE CRYSTALS	SNOW "GRAINS "PELLETS "SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N														100.0
NNE														100.0
NE														100.0
ENE														100.0
E														100.0
ESE														100.0
SE														100.0
SSE														100.0
S		5.9							8.8					88.2
SSW			11.9						7.1		11.9			76.2
SW		.8	6.0						9.8		3.0			86.3
WSW	.4		3.4						8.0		2.1			87.8
W		.2	2.2						3.4		2.2			92.7
WNW			.7						1.4		6.3			91.3
NW											2.9			91.4
NNW														100.0
VARIABLE														
CALM									12.1		3.0			86.4
TOTAL	1	4	33						65		37			1118
% TOTAL	.1	.3	2.7						5.2		3.0			90.2

TOTAL NUMBER OF OBSERVATIONS 1,240

PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

STATION 23239 ALAMEDA, CALIFORNIA STATION NAME JAN 1973-DEC 1977 YEARS MONTH AUGUST ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET "SHOWERS ICE CRYSTALS	SNOW "GRAINS "PELLETS "SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	14.3								28.6					71.4
NNE														100.0
NE														
ENE														
E														100.0
ESE														100.0
SE	33.3													66.7
SSE														100.0
S	16.7							5.6						77.8
SSW	3.3		6.7						6.7					76.7
SW	1.1		6.8						13.6					81.8
WSW	1.4		4.7						5.7					89.1
W	.7	.2	3.0					.5	5.3	.2				89.7
WNW			2.3					2.8	6.9					88.6
NW									2.8					86.1
NNW	7.7								7.7					92.3
VARIABLE														
CALM	2.9							1.4	7.1					81.6
TOTAL	18	1	39					6	77	1	32			1094
% TOTAL	1.5	.1	3.1					.5	6.2	.1	2.6			88.2

TOTAL NUMBER OF OBSERVATIONS 1,240

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PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

23239 ALAMEDA, CALIFORNIA JAN 1973-DEC 1977 SEPTEMBER ALL
STATION NAME STATION YEARS MONTH HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET " SHOWERS ICE CRYSTALS	SNOW " GRAINS " PELLETS " SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N														100.0
NNE														100.0
NE														100.0
ENE	100.0								100.0					100.0
E									9.1					100.0
ESE			9.1											81.8
SE		8.3							7.1					91.7
SSE	14.3	4.2	2.1						8.3		6.3			85.7
S	4.2	2.3	4.5						6.8		2.3			77.1
SSW	2.3	3.3	3.3						6.6	1.6				84.1
SW		1.2	3.0						7.8		3.6			83.6
WSW	.6	.2	1.6						3.8	.2	3.0			88.2
W	.2	.2	.9						9.4		3.1			82.1
WNW			1.9						3.8		1.9			90.4
NW		2.8	2.8						3.6		3.6			77.6
NNW														
VARIABLE														
CALM									10.3		1.3			87.2
TOTAL	9	10	24						61	2	46			1034
% TOTAL	.8	.8	2.0						6.8	.2	3.8			86.2

TOTAL NUMBER OF OBSERVATIONS 1,200

PERCENTAGE FREQUENCY OF WIND DIRECTION
VS. WEATHER CONDITIONS

STATION 23239 ALAMEDA, CALIFORNIA STATION NAME JAN 1973-DEC 1977 YEARS OCTOBER MONTH ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET "SHOWERS ICE CRYSTALS	SNOW GRAINS "PELLETS "SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N		1.3							2.9		3.9			85.3
NNE									3.4	3.4	3.4			89.7
NE		10.0									10.0			80.0
ENE														100.0
E														96.2
ESE	8.3								4.2		8.3			83.3
SE	25.7								17.1					68.6
SSE	11.1	11.1	3.7						3.7		7.4			63.0
S	6.3	6.3							3.1		3.1			76.6
SSW	3.4	6.9							3.4		3.4			82.8
SW	4.8	3.2							7.9		3.2			82.5
WSW		.9	.9						1.9		2.8			88.8
W		.6	.3					.3	2.9		7.3			87.9
WNW		.8							2.3	1.5	7.7			81.5
NW		4.2							8.3		8.3			69.4
NNW									3.5		7.0			75.6
VARIABLE														
CALM														
TOTAL	23	20	4					1	49	5	68			1026
% TOTAL	1.9	1.6	.3					.1	4.0	.4	5.5			82.7

TOTAL NUMBER OF OBSERVATIONS 1,240

PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

23239 ALAMEDA, CALIFORNIA JAN 1973-DEC 1977 ALL

STATION NAME MONTH HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET "SHOWERS ICE CRYSTALS	SNOW "GRAINS "PELLETS "SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	0.9								7.3	6.4	23.9			65.1
NNE									9.1	9.1	27.3			57.6
NE									18.2	9.1	36.4			54.3
ENE									20.0	10.0	30.0			60.0
E	3.3								10.3	3.3	13.2			71.1
ESE	21.4								7.1		9.3			64.3
SE	29.2	4.6	3.1						13.8	3.1	4.6			53.8
SSE	23.3								10.6	4.3	4.3			61.7
S	13.9	3.7	1.2						9.8	3.7	13.9			52.4
SSW	11.4		3.7						3.7	2.9	14.3			51.4
SW	3.0	6.1							9.1		6.1			75.8
WSW	3.6	1.8							1.8	1.8	10.9			72.7
W	1.6								2.4		7.1			88.2
WNW		1.2							4.7	3.3	12.8			79.1
NW									3.1	4.1	11.3			80.4
NNW	0.8								3.2	1.6	11.3			80.6
VARIABLE														
CALM	1.0								2.7	8.7	13.3			72.8
TOTAL	68	10	6						81	51	157			852
% TOTAL	3.7	0.8	0.3						6.8	4.3	13.1			71.0

TOTAL NUMBER OF OBSERVATIONS 1,200

PERCENTAGE FREQUENCY OF WIND DIRECTION
VS. WEATHER CONDITIONS

STATION 23239 ALAMEDA, CALIFORNIA JAN 1973-DEC 1977 DECEMBER ALL
STATION NAME YEARS MONTH HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET " SHOWERS ICE CRYSTALS	SNOW " GRAINS " PELLETS " SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	2.6								8.7	4.3	17.4			62.6
NNE			4.2						16.7	4.2	20.8			41.7
NE	8.3										16.7			50.0
ENE										6.7	20.0			66.7
E	3.3								3.3	7.0	22.8			61.4
ESE	6.6		1.6					1.6	19.7	1.6	8.2			54.1
SE	12.8	4.3						3.2	14.9	3.3	7.4			52.1
SSE	11.1	3.2							9.5	7.9	12.7			47.6
S	13.4	1.3	6.0						22.4	4.3	19.4			40.3
SSW	12.0	4.0							12.0	4.0	20.0			56.0
SW	21.7								30.4	4.3	17.4			34.8
WSW	4.2		4.2						20.8		12.3			50.0
W									3.1	4.6	16.9			64.6
WNW	2.0								9.8	2.0	13.7			62.7
NW	3.3		3.3						20.3	8.1	22.8			38.2
NNW	.6		.6						12.3	14.2	18.7			43.8
VARIABLE														
CALM	2.3		2.3						20.3	7.9	13.8			47.7
TOTAL	60	8	18					4	154	84	203			623
% TOTAL	4.8	.6	1.3					.3	14.8	6.8	16.3			50.4

TOTAL NUMBER OF OBSERVATIONS 1,240

PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

STATION **23239** **ALAMEDA, CALIFORNIA** STATION NAME **JAN 1973-DEC 1977** YEARS **ALL** MONTH **ALL** HOURS (L.S.T.) **ALL**

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET " SHOWERS ICE CRYSTALS	SNOW " GRAINS " PELLETS " SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	.9	.2							4.3	4.8	16.1			74.8
NNE	2.2	.4	1.3						6.7	5.4	14.3			71.7
NE	3.9	2.0							8.8	2.9	14.7			67.6
ENE	6.3	2.1				1.1			6.3	2.1	9.5			77.9
E	6.3	1.9	.4						5.6	3.7	10.4			75.6
ESE	12.7	1.9	1.3			.3		.3	10.3	2.6	5.6			69.0
SE	18.3	4.6	.9					.7	10.3	2.7	4.1			63.6
SSE	13.0	3.4	1.7						8.8	2.5	7.4			65.0
S	9.2	4.7	1.8					.1	7.9	1.8	6.8			69.6
SSW	3.0	2.3	4.1					.2	6.2	.8	8.6			77.6
SW	2.8	1.3	2.6					.3	7.5	.6	4.0			63.4
WSW	1.4	.6	2.2						3.0	.1	3.5			87.3
W	.6	.4	1.3					.0	3.3	.3	3.2			90.8
WNW	.4	.2	.6						3.3	.8	5.4			88.8
NW	.7	.8	.6					.1	3.3	2.1	10.0			77.7
NNW	1.1	.3	.3			.1			4.3	4.6	11.2			73.3
VARIABLE														
CALM	1.3	.1	.7					.1	9.3	4.1	7.9			73.4
TOTAL	427	152	190			3	1	14	825	262	948			11854
% TOTAL	2.9	1.0	1.3			.0	.0	.1	5.6	1.8	6.3			81.2
TOTAL NUMBER OF OBSERVATIONS														14,607

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PART B PRECIPITATION, SNOWFALL & SNOW DEPTH

This portion of the Uniform Summary presents in two sets of tables, the daily amounts and extreme values of the following:

PRECIPITATION	DERIVED FROM DAILY OBSERVATIONS
SNOWFALL*	DERIVED FROM DAILY OBSERVATIONS
SNOW DEPTH	DERIVED FROM DAILY OBSERVATIONS

1. The first table for each of the above presents the percentage frequency of various daily amounts, by month and annual, all years combined. The percentage of days with measurable amounts is also computed monthly and annually. Also shown for the precipitation and snowfall tables, are the monthly mean amounts, annual mean amounts (sum of monthly mean amounts), and the extreme monthly amounts (greatest and least). The latter statistics above are not presented for the snow depth summary since they would have limited use and may be misleading.
2. The second set of tables for each of the above presents the extreme daily amounts by individual year and month for the entire period of record available. Also provided are the means and standard deviations for each month and annual (all months). The extremes for a month are not printed nor used in computations if one or more observations are missing.

NOTE: Snow depth was recorded and punched at various hours during the period available from U. S. operated stations. The periods and hours used in the snow depth summary vary by service and period as follows:

Air Force Stations	From beginning of record thru 1945	Snow depth at 0800 LST
	Jan 46-May 57	Snow depth at 1230 GCT
	Jun 57-present	Snow depth at 1200 GCT
U. S. Navy and Weather Bureau Stations	From beginning of record thru Jun 52	Snow depth at 0030 GCT
	Jul 52-May 57	Snow depth at 1230 GCT
	Jun 57-present	Snow depth at 1200 GCT

* Hail was included in snowfall occurrence in the summary of the day observation prior to Jan 1956,

DAILY AMOUNTS

PERCENTAGE FREQUENCY OF
PRECIPITATION
(FROM DAILY OBSERVATIONS)

STATION 23229 ALAMEDA, CALIFORNIA STATION NAME 45-77 YEARS

5722 Daily Amounts Jan. 1969

PRECIP.	NONE	TRACE	0.1-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	5.1-10.0	10.1-20.0	20.1-50.4	50.5-100.0	100.1-200.0	200.1-500.0	500.1-1000.0	1000.1-2000.0	PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
																			MEAN	GREATEST	LEAST
JAN	59.1	8.4	2.5	6.0	3.2	6.5	6.6	5.1	2.6	.1							32.5	930	3.51	6.42	.26
FEB	59.7	9.8	1.8	5.2	4.3	3.5	5.5	4.3	.9								30.5	847	2.26	7.18	TRACE
MAR	60.2	11.9	1.6	6.7	3.1	6.6	5.2	3.7	1.0								27.9	992	2.31	7.67	TRACE
APR	72.3	10.2	1.4	4.4	2.8	3.5	3.3	1.6	.4								17.5	930	1.19	5.45	TRACE
MAY	77.5	15.0	.8	2.1	1.8	1.6	.9	.2	.1								7.5	961	.35	3.41	TRACE
JUN	81.1	15.4	.8	.8	.7	.6	.2	.2									3.4	960	.14	1.19	TRACE
JUL	79.6	19.5	.2	.3	.1	.1	.1	.1									.9	992	.05	.75	TRACE
AUG	74.4	22.8	.8	.9	.4	.5	.1										2.8	961	.06	.88	TRACE
SEP	83.3	13.1	.4	1.1	.7	.8	.1	.2	.1	.1							3.5	990	.23	2.58	.00
OCT	78.4	9.3	1.5	3.4	1.6	2.1	1.8	1.2	.7	.1							12.4	961	1.12	8.18	TRACE
NOV	66.8	8.2	2.3	4.2	3.0	5.6	5.1	3.4	1.5								25.1	930	2.30	7.86	TRACE
DEC	60.2	9.6	2.0	5.8	3.2	6.2	6.0	4.8	1.9	.1							30.2	992	3.10	11.06	.18
ANNUAL	71.0	12.8	1.3	3.4	2.1	3.5	2.9	2.1	.8	.0							16.2	11446	16.62		

DAILY AMOUNTS

PERCENTAGE FREQUENCY OF
SNOWFALL
(FROM DAILY OBSERVATIONS)

23239 STATION ALAMEDA, CALIFORNIA 45-77 YEARS

5722 Daily Amounts 1969

AMOUNTS (INCHES)																			PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
PRECIP.	NONE	TRACE	.01	.02-.05	.06-.10	.11-.25	.26-.50	.51-1.00	1.01-2.50	2.51-5.00	5.01-10.00	10.01-20.00	OVER 20.00	MEAN	GREATEST	LEAST							
SNOWFALL	NONE	TRACE	0.1-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-15.4	15.5-25.4	25.5-50.4	OVER 50.4										
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120										
JAN	99.4	.6												992	TRACE	.0							
FEB	99.5	.5												875	TRACE	.0							
MAR	99.7	.3												930	TRACE	.0							
APR	100.0													960	.0	.0							
MAY	100.0													1023	.0	.0							
JUN	100.0													990	.0	.0							
JUL	100.0													1023	.0	.0							
AUG	100.0													1023	.0	.0							
SEP	100.0													990	.0	.0							
OCT	100.0													1023	.0	.0							
NOV	99.8	.2												960	TRACE	.0							
DEC	99.5	.5												1023	TRACE	.0							
ANNUAL	99.8	.2												11812	.0								

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3100
(FROM DAILY OBSERVATIONS)

5722 Daily Amounts Jan. 1960

YEARS

48-77

ALAMEDA, CALIFORNIA
STATION NAME

23239
STATION

	AMOUNTS (INCHES)											PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
	PRECIP.	NONE	TRACE	0.1-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-15.4	15.5-25.4	25.5-50.4	50.1-100.0	100.1-200.0	OVER 200.0
SNOWFALL	NONE	NONE	TRACE	1	2	3	4.6	7.12	13.24	25.36	37.48	49.60	61.120	81.120	OVER 120	
SNOW- DEPTH	NONE	NONE	TRACE													
JAN	99.8		.2													899
FEB	100.0															819
MAR	100.0															868
APR	100.0															870
MAY	100.0															899
JUN	100.0															840
JUL	100.0															899
AUG	100.0															870
SEP	100.0															930
OCT	100.0															
NOV	100.0															
DEC	100.0															
ANNUAL	100.0															10531

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DAILY AMOUNTS

PERCENTAGE FREQUENCY OF
SNOW DEPTH
(FROM DAILY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

48-77

YEARS

AMOUNTS (INCHES)																	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
PRECIP.	NONE	TRACE	TRACE	0.1-0.4	0.5-1.4	.02-.05	.06-10	.11-.25	.26-.50	.51-1.00	1.01-2.50	2.51-5.00	5.01-10.00	10.01-20.00	OVER 20.00	PERCENT OF DAYS WITH MEASUR- ABLE AMTS				
SNOWFALL	NONE	NONE	TRACE	TRACE	0.1-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-15.4	15.5-23.4	25.5-50.4	61-120	OVER 120				
SNOW- DEPTH	NONE	NONE	TRACE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120					
JAN	99.8		.2														899			
FEB	100.0																819			
MAR	100.0																868			
APR	100.0																870			
MAY	100.0																899			
JUN	100.0																870			
JUL	100.0																868			
AUG	100.0																899			
SEP	100.0																840			
OCT	100.0																899			
NOV	100.0																870			
DEC	100.0																930			
ANNUAL	100.0		.0														10531			

NAVWEASERYCOM

5722 Daily Amounts Jan. 1969

EXTREME VALUES

PRECIPITATION (FROM DAILY OBSERVATIONS)

23239 ALAMEDA, CALIFORNIA
STATION NAME

45-77

YEARS

24 HOUR AMOUNTS IN INCHES

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
45			1.11		.29	TRACE	TRACE	TRACE	TRACE	.81	.70		
46	1.47	.61	.74	.02	.40	.22	TRACE	TRACE	TRACE	.09	1.24	.68	
47			.65	.04		.01	TRACE	TRACE	TRACE			.42	
48	.36							TRACE	.01			1.20	
49	.92	.56	1.08	TRACE	.32	TRACE	.43	.06	TRACE	.20	.55	.74	1.08
50	1.71	.69	1.23	.67	.47	TRACE	TRACE	TRACE	TRACE	1.29	1.23	1.60	1.71
51	.89	1.48	.69	.58	.59	TRACE	TRACE	.12	TRACE	.71	1.21	1.55	1.55
52		.46	.92	.21	.16	.23	TRACE	TRACE	TRACE	.05	.86	3.69	
53	.52	TRACE	.56	1.33	.10	.43	TRACE	.10	TRACE	.13	1.01	.04	1.33
54	.89	.71	.98	.72	.13	.03	.02	.02	TRACE	.08	.66	1.14	1.14
55	.63	.89	.25	.20	.07	TRACE	.01	TRACE	TRACE	.05	.48	1.86	1.86
56	1.92	.73	TRACE	.83	.36	.02	TRACE	TRACE	.10	.57	.05	.16	1.92
57	.95	.64	.43	.61	1.39	.06	TRACE	TRACE	1.05	1.38	.23	.96	1.39
58	.92	1.15	1.24	1.25	.12	.04	TRACE	TRACE	.08	.05	.04	.68	1.25
59	1.16	.92	.14	.24	.01	TRACE	TRACE	.02	2.53	TRACE	TRACE	1.62	2.53
60	.91	.92	.62	.25	.25	TRACE	TRACE	TRACE	TRACE	.29	1.18	.37	1.18
61	1.10	.24	1.00	.41	.40	TRACE	TRACE	.02	.30	.04	.95	.96	1.10
62	.54	1.43	.57	.25	TRACE	TRACE	TRACE	.07	.24	3.54	.34	1.08	3.54
63	1.22	1.05	1.61	.98	.33	TRACE	TRACE	.02	.09	.51	1.00	.26	1.61
64	1.35	.11	.69	.02	.05	.47	TRACE	.01	TRACE	.64	1.97	.67	1.97
65	.85	.33	.56	.66	TRACE	TRACE	TRACE	.03	TRACE	.11	.69	1.12	1.12
66	1.51	.65	.26	.17	.10	.06	.07	.11	.10	TRACE	.93	.89	1.51
67	2.68	.16	.75	1.84	.07	.97	TRACE	.01	.02	.34	.30	.50	2.68
68	1.08	.61	1.34	.37	.07	TRACE	TRACE	.08	.01	.17	1.00	.56	1.34
69	1.16	1.11	.34	.83	TRACE	.01	TRACE	TRACE	.04	1.90	.46	1.89	1.90
70	1.23	.38	.78	.05	.03	.57	TRACE	TRACE	.00	.51	1.09	.98	1.23
71	.42	.15	1.06	.29	.03	TRACE	TRACE	TRACE	.15	.03	.45	.78	1.06
72	.39	.51	.05	.37	TRACE	.23	TRACE	TRACE	.51	1.75	1.16	.79	1.75
73	1.59	1.17	.59	.01	.05	TRACE	TRACE	TRACE	.21	.60	1.79	1.34	1.79
74	1.11	.54	.79	1.23	TRACE	.06	.75	TRACE	TRACE	.34	.22	.86	1.23
MEAN													
S. D.													
TOTAL OBS.													

NAVWEASERVCOM

5723 Extreme Values Jan 1969

PRECIPITATION
(FROM DAILY OBSERVATIONS)

45-77

YEARS

24 HOUR AMOUNTS IN INCHES

[illegible]

NAVWEASERVCOM

PRECIPITATION
(FROM DAILY OBSERVATIONS)

ALAMEDA, CALIFORNIA

23239
STATION

STATION NAME

YEARS

24 HOUR AMOUNTS IN INCHES
/BASED ON LESS THAN FULL MONTHS/

[illegible]

NAVWEASERVCOM

EXTREME VALUES

SNOWFALL

(FROM DAILY OBSERVATIONS)

23239

ALAMEDA, CALIFORNIA

STATION NAME

45-77

YEARS

24 HOUR AMOUNTS IN INCHES

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
45	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
46	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
47	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
49	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
50	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
51	TRACE	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE
52	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
53	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
54	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
55	.0	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE
56	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
57	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE
58	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
59	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
62	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE
63	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
64	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
65	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
66	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE	.0	TRACE
67	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
68	TRACE	.0	TRACE	.0	.0	.0	.0	.0	.0	.0	TRACE	TRACE	TRACE
69	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE	TRACE
71	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE
72	.0	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE
73	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
74	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE
MEAN													
S. D.													
TOTAL OBS.													

5723 Extreme Values Jan 1969

FROM DAILY OBSERVATIONS)

45-77

ALAMEDA, CALIFORNIA

STATION NAME

YEARS

24 HOUR AMOUNTS IN INCHES

[illegible]

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FROM DAILY OBSERVATIONS)

STATION NAME

YEARS

24 HOUR AMOUNTS IN INCHES
/BASED ON LESS THAN FULL MONTHS/

[illegible]

NAVWEASERVCOM

5723 Extreme Values Jan 1969

EXTREME VALUES

SNOW DEPTH

(FROM DAILY OBSERVATIONS)

48-77

YEARS

ALAMEDA, CALIFORNIA

STATION NAME

23239

STATION

DAILY SNOW DEPTH IN INCHES

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
45													
46													
47													
48													
49	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0
51	0	0	0	0	0	0	0	0	0	0	0	0	0
52	0	0	0	0	0	0	0	0	0	0	0	0	0
53	0	0	0	0	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
56	0	0	0	0	0	0	0	0	0	0	0	0	0
57	TRACE	0	0	0	0	0	0	0	0	0	0	0	0
58	0	0	0	0	0	0	0	0	0	0	0	0	0
59	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
61	0	0	0	0	0	0	0	0	0	0	0	0	0
62	0	0	0	0	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0	0	0	0	0
67	0	0	0	0	0	0	0	0	0	0	0	0	0
68	0	0	0	0	0	0	0	0	0	0	0	0	0
69	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
71	TRACE	0	0	0	0	0	0	0	0	0	0	0	TRACE
72	0	0	0	0	0	0	0	0	0	0	0	0	0
73	0	0	0	0	0	0	0	0	0	0	0	0	0
74	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN													
S. D.													
TOTAL OBS.													

NAVWEASERVCOM

5723 Extreme Values Jan 1969

FROM DAILY OBSERVATIONS)

STATION	STATION NAME
23239	ALAMEDA, CALIFORNIA

40-77

YEARS

DAILY SNOW DEPTH IN INCHES

[illegible]

NAVWEASERVCOM

FROM DAILY OBSERVATIONS)

YEARS

STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE	STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE
STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE	STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE

EVALUATION

DAILY SNOW DEPTH IN INCHES
/BASED ON LESS THAN FULL MONTHS/

[illegible]

NAVWEASERVCOM

DAILY EXTREME AMOUNTS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

1946-1977

ALAMEDA, CALIFORNIA

23239

STATION

STATION NAME

YEARS

JANUARY
MONTHFEBRUARY
MONTH

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.71	18	1958			
2	0.92	23	1977			
3	1.11	28	1974	T	T	1974
4	1.47	37	1946			
5	1.02	26	1959			
6	0.68	17	1975			
7	0.52	13	1953			
8	1.38	40	1973			
9	1.04	26	1973			
10	0.99	25	1950			
11	1.24	31	1973	T	T	1951
12	0.95	24	1957	T	T	1971
13	1.11	28	1969			
14	1.92	49	1956			
15	1.26	32	1956			
16	1.59	40	1973			
17	1.71	43	1950			
18	1.16	29	1969			
19	1.12	28	1969			
20	1.88	48	1967			
21	2.68	68	1967	T	T	1962
22	0.32	8	1956			
23	0.92	23	1958			
24	1.16	29	1959			
25	1.10	28	1961			
26	0.60	15	1969			
27	0.74	19	1950	T	T	1968
28	1.07	27	1947	T	T	1957
29	1.51	38	1966			
30	1.08	27	1968			
31	1.22	31	1963			
Monthly	2.68	68	1967	T	T	1974*

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.71	18	1960			
2	0.61	15	1946			
3	0.65	17	1966	T	T	1972
4	1.48	38	1951			
5	1.04	26	1969	T	T	1976*
6	1.17	30	1973			
7	0.59	15	1958			
8	0.66	17	1960			
9	1.43	36	1962			
10	0.92	23	1959			
11	1.11	28	1969			
12	1.05	27	1963			
13	0.71	18	1954			
14	1.39	35	1962			
15	0.51	13	1962			
16	0.61	15	1968			
17	0.41	10	1959			
18	1.15	29	1958			
19	0.58	15	1956			
20	0.50	13	1959			
21	0.64	16	1957			
22	0.73	19	1956			
23	0.75	19	1969			
24	0.56	14	1949			
25	0.39	10	1969			
26	0.89	23	1955	T	T	1955
27	0.76	19	1973			
28	0.61	15	1969			
29	0.61	15	1976			
30						
31						
Monthly	1.48	38	1951	T	T	1976*

* ALSO ON EARLIER YEARS

T - TRACE, AN AMOUNT TOO SMALL TO MEASURE

BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

23239

ALAMEDA, CALIFORNIA

STATION

STATION NAME

YEARS

1945-1977

DAILY EXTREME AMOUNTS

MARCH

MONTH

APRIL

MONTH

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.57	14	1947			
2	0.95	24	1976			
3	0.44	11	1947			
4	0.78	20	1970			
5	0.57	14	1962			
6	0.54	14	1962			
7	0.60	15	1975			
8	0.80	20	1975			
9	0.43	11	1949			
10	0.76	19	1975			
11	0.63	16	1949			
12	1.34	34	1968			
13	1.25	32	1975	Y	Y	1975*
14	1.00	25	1961			
15	1.21	31	1977			
16	0.98	25	1954			
17	0.09	2	1969			
18	0.56	14	1953			
19	1.08	27	1949			
20	0.94	24	1958			
21	1.02	26	1958	Y	Y	1975
22	0.93	24	1945			
23	1.24	31	1958			
24	1.23	31	1950			
25	1.11	28	1945			
26	0.45	11	1971			
27	1.61	41	1963			
28	0.65	17	1947			
29	0.61	15	1958			
30	0.75	19	1967			
31	0.74	19	1946	Y	Y	1975*
Monthly	1.61	41	1963			

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	1.23	31	1974			
2	1.25	32	1958			
3	0.44	11	1958			
4	0.50	13	1975			
5	0.83	21	1969			
6	1.84	47	1967			
7	0.67	17	1950			
8	0.38	10	1963			
9	0.66	17	1963			
10	0.60	15	1967			
11	0.46	12	1956			
12	0.09	2	1972			
13	0.41	10	1957			
14	0.55	14	1963			
15	0.55	14	1967			
16	0.27	7	1957			
17	0.61	15	1957			
18	0.39	10	1969			
19	0.23	6	1953			
20	0.39	10	1963			
21	0.41	10	1961			
22	0.15	4	1967			
23	0.50	13	1967			
24	0.27	7	1972			
25	0.82	21	1963			
26	0.83	21	1956			
27	1.33	34	1953			
28	0.58	15	1951			
29	0.22	6	1948			
30	0.44	11	1953			
31						
Monthly	1.84	47	1967			

* ALSO ON EARLIER YEARS

T - TRACE, AN AMOUNT TOO SMALL TO MEASURE

BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

23239 ALAMEDA, CALIFORNIA
STATION STATION NAME

MAY
MONTH

YEARS

1945-1977

JUNE
MONTH

DAILY EXTREME AMOUNTS

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.47	12	1950			
2	0.09	2	1957*			
3	0.59	15	1951			
4	0.05	1	1973*			
5	0.05	1	1961			
6	0.05	1	1961			
7	0.16	4	1952			
8	0.33	8	1963			
9	0.46	12	1957			
10	0.04	1	1963			
11	0.17	4	1977			
12	0.30	8	1945			
13	0.16	4	1945			
14	0.32	8	1949*			
15	T	T	1949			
16	T	T	1972*			
17	0.20	5	1957			
18	1.39	35	1957			
19	0.40	10	1961			
20	0.66	17	1957			
21	0.06	2	1953			
22	0.12	3	1958			
23	0.25	6	1960			
24	0.15	4	1960			
25	0.29	7	1946			
26	0.10	3	1946			
27	0.40	10	1947			
28	T	T	1974*			
29	0.44	11	1948			
30	0.06	2	1948			
31	0.12	3	1947			
Monthly	1.39	35	1957			

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.06	2	1967			
2	0.97	25	1967			
3	T	T	1974*			
4	0.08	2	1947			
5	0.16	4	1967			
6	0.43	11	1953			
7	0.15	4	1947			
8	0.57	14	1970			
9	0.23	6	1972			
10	0.01		1948			
11	T	T	1976*			
12	0.03	1	1954			
13	T	T	1977*			
14	T	T	1977*			
15	0.02	1	1964			
16	T	T	1977*			
17	T	T	1977			
18	0.06	2	1974			
19	T	T	1977*			
20	T	T	1975*			
21	T	T	1969*			
22	T	T	1973*			
23	T	T	1973*			
24	0.03	1	1975			
25	T	T	1971*			
26	T	T	1971*			
27	0.08	2	1952			
28	0.23	6	1952			
29	T	T	1964*			
30	T	T	1977*			
31						
Monthly	0.97	25	1967			

* ALSO ON EARLIER YEARS

T - TRACE, AN AMOUNT TOO SMALL TO MEASURE

BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

23239 STATION ALAMEDA, CALIFORNIA
STATION NAME

JULY
MONTH

DAY	PRECIPITATION GREATEST				SNOWFALL GREATEST			
	INCHES	MM	DATE		INCHES	MM	DATE	
1	T	T	1969*					
2	T	T	1977*					
3	0.01		1955					
4	T	T	1965*					
5	T	T	1970*					
6	T	T	1972*					
7	T	T	1974*					
8	0.75	19	1974					
9	T	T	1975*					
10	T	T	1975*					
11	T	T	1975*					
12	0.02	1	1966					
13	T	T	1965*					
14	T	T	1964*					
15	0.15	4	1975					
16	T	T	1964*					
17	0.01	T	1976					
18	T	T	1976*					
19	T	T	1975*					
20	T	T	1975*					
21	T	T	1975*					
22	T	T	1971*					
23	T	T	1977*					
24	T	T	1977*					
25	0.02	1	1954					
26	T	T	1971*					
27	T	T	1974*					
28	T	T	1975*					
29	T	T	1975*					
30	0.43	11	1949					
31	0.03	1	1949					
Monthly	0.75	19	1974					

* ALSO ON EARLIER YEARS
T - TRACE, AN AMOUNT TOO SMALL TO MEASURE
BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS

DAILY EXTREME AMOUNTS

1945-1977

YEARS

AUGUST
MONTH

DAY	PRECIPITATION GREATEST				SNOWFALL GREATEST			
	INCHES	MM	DATE		INCHES	MM	DATE	
1	T	T	1977*					
2	T	T	1976*					
3	T	T	1976*					
4	T	T	1976*					
5	T	T	1977*					
6	T	T	1977*					
7	T	T	1959*					
8	0.02	1	1963*					
9	0.07	2	1962					
10	T	T	1977*					
11	0.03	1	1965					
12	T	T	1976*					
13	T	T	1976*					
14	0.19	5	1976					
15	0.21	5	1976					
16	T	T	1975*					
17	0.15	4	1976					
18	0.32	8	1976					
19	0.01		1968					
20	0.01		1968					
21	0.08	2	1968					
22	0.01		1976					
23	T	T	1977*					
24	0.02	1	1959					
25	0.01		1977*					
26	0.02	1	1961*					
27	0.06	2	1949					
28	T	T	1975*					
29	0.12	3	1951					
30	0.11	3	1966					
31	0.01		1964					
Monthly	0.32	8	1976					

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

23239 STATION ALAMEDA, CALIFORNIA
STATION NAME

SEPTEMBER
MONTH

YEARS

1945-1977

OCTOBER
MONTH

DAILY EXTREME AMOUNTS

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	T	T	1967*			
2	T	T	1977*			
3	T	T	1977*			
4	T	T	1976*			
5	T	T	1976*			
6	0.04	1	1969			
7	T	T	1963*			
8	T	T	1975			
9	T	T	1963*			
10	T	T	1976*			
11	0.02	1	1976			
12	0.09	2	1963			
13	T	T	1975*			
14	0.01	1	1968			
15	T	T	1977*			
16	0.30	8	1961			
17	0.05	1	1959			
18	2.53	64	1959			
19	0.75	19	1977			
20	0.21	5	1973			
21	T	T	1945			
22	0.11	3	1973			
23	T	T	1977*			
24	0.04	1	1973			
25	0.14	4	1972			
26	0.51	13	1972			
27	1.05	27	1957			
28	0.24	6	1962			
29	0.15	4	1971			
30	0.11	3	1976			
31						
Monthly	2.53	64	1959			

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.37	9	1976			
2	0.34	9	1967			
3	0.01		1946			
4	T	T	1968*			
5	0.29	7	1960			
6	0.08	2	1973*			
7	0.29	7	1973			
8	0.17	4	1973			
9	1.19	30	1975			
10	1.38	35	1957			
11	1.97	50	1962			
12	2.36	60	1962			
13	3.54	90	1962			
14	0.71	18	1972			
15	1.90	48	1969			
16	0.52	13	1972			
17	0.02	1	1972			
18	0.13	3	1953			
19	0.08	2	1954			
20	0.25	6	1970			
21	0.51	13	1970			
22	0.60	15	1973			
23	0.32	8	1957			
24	0.71	18	1951			
25	1.29	33	1950			
26	0.36	10	1950			
27	0.34	9	1974			
28	0.64	16	1964			
29	0.62	16	1964			
30	0.81	21	1943			
31	0.15	4	1974			
Monthly	3.54	90	1962			

* ALSO ON EARLIER YEARS

T - TRACE, AN AMOUNT TOO SMALL TO MEASURE

BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

23239 STATION
ALAMEDA, CALIFORNIA STATION NAME

YEARS

1945-1977

DAILY EXTREME AMOUNTS

NOVEMBER
MONTH

DECEMBER
MONTH

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.29	7	1964			
2	0.41	10	1964			
3	1.13	29	1972			
4	0.53	13	1963			
5	1.79	45	1973			
6	0.83	21	1966			
7	0.49	12	1965			
8	0.48	12	1954			
9	0.53	14	1949			
10	1.16	29	1972			
11	0.92	23	1973			
12	1.97	50	1964			
13	1.16	29	1972			
14	1.00	25	1968			
15	0.93	24	1966			
16	0.62	16	1973			
17	0.76	19	1973			
18	1.23	31	1950			
19	1.24	31	1946			
20	0.88	22	1961			
21	1.67	42	1977			
22	0.27	7	1973			
23	1.00	25	1963			
24	0.70	18	1945			
25	1.18	30	1960			1965
26	1.21	31	1951			
27	0.89	23	1970			
28	1.09	28	1970			
29	1.04	26	1970			
30	1.27	32	1973			1967
31						
Monthly	1.97	50	1964			1967*

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	1.46	37	1951			
2	0.98	25	1970			1970
3	1.60	41	1950			
4	0.83	21	1945			
5	2.11	54	1945			
6	3.69	94	1952			
7	1.02	26	1952			
8	0.64	16	1955			
9	1.14	29	1954			
10	0.34	9	1969			
11	0.47	12	1965			
12	0.39	10	1971			
13	0.53	13	1950			
14	0.56	14	1977			
15	1.08	27	1962			
16	0.80	20	1962			
17	0.83	21	1977			1970
18	0.44	11	1972			1967
19	1.41	36	1952			
20	1.89	48	1969			
21	1.55	39	1945			
22	1.66	47	1955			1968
23	1.62	41	1959			
24	0.68	17	1946			
25	0.78	20	1971			1968
26	1.34	34	1973			
27	3.53	90	1945			
28	1.55	39	1951			
29	0.58	15	1952			
30	0.73	19	1976			
31	0.49	12	1954			
Monthly	3.69	94	1952			1970*

* ALSO ON EARLIER YEARS
T - TRACE, AN AMOUNT TOO SMALL TO MEASURE
BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS

PART C

SURFACE WINDS

Presented in this part are various tabulations of surface winds as follows:

1. Extreme Values - Peak Gusts: Derived from daily observations and presented by individual year and month for the entire period of record available. Speeds are presented in knots, while directions are given in 16 compass points from the beginning of record through 1963, and in tens of degrees starting in January 1964. When 90% or more of the daily observations of peak gust wind data are available for a month, the extreme is selected and printed. These values are then used to compute means and standard deviations for the entire period. Every month of a year must have valid observations present before the ALL MONTHS value is selected for that year. Means and standard deviations are computed when four or more values are present for any column. A supplementary list of Peak Gusts by year-month with < 90% observations reported is also provided.

NOTE: According to [REDACTED] specifications, "peak gust data are recorded only at stations with continuous instantaneous wind-speed recorders."

2. Bivariate percentage frequency tabulations: Derived from 3-hourly observations, these tabulations are a percentage frequency of wind directions to 16 compass points and calm by wind speeds (knots) in increments of Beaufort classifications. Percentages are shown by both direction and speed, and in addition the mean wind speed for each direction.

A separate category is provided on the form for variable winds, which are reported in some data sources. In these data where light and variable winds are reported with no directions but with speeds given, the speeds will be summarized in the appropriate groups opposite the column headed VAREBL.

- a. Three tables are prepared for all surface winds included, and for all years combined as follows:

- (1) Annual - all hours combined
- (2) By month - all hours combined
- (3) By month - by standard 3-hour groups

- b. A separate annual table is also presented for surface winds meeting the following ceiling and visibility conditions: INSTRUMENT CLASS: Ceiling 200 through 1400 feet inclusive with visibility equal to or greater than 1/2 mile, and/or visibility 1/2 through 2-1/2 miles inclusive with ceiling equal to or greater than 200 feet.

EXTREME VALUES

SURFACE WINDS
(FROM DAILY OBSERVATIONS)

23239

ALAMEDA, CALIFORNIA

45-77

STATION

STATION NAME

YEARS

DAILY PEAK GUSTS IN KNOTS

THIS PAGE IS BEST QUALITY PRACTICABLE
FROM COPY FURNISHED TO DDG

5723 Extreme Values Jan 1969

MONTH YEAR		JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
45				SE	40NW	38W	29W	23W	28W	25SW	39W	28S	40	
46	W	30S	32SW	43W	31W	33W	34W	27W	24W	30W	33WNW	44WNW	24	WNW 44
47			SE	36S	30SW	26W	28NW	29W	32WSW	28SE	34W	33SE	27	
48			NW	36S	34SW	44NW	33W	30WNW	26WNW	27WNW	30W	30W	31	
49	N	34SSW	47SSW	46NNW	39W	44SSW	36W	28W	28W	26NNE	32S	34NE	32	SSW 47
50	SW	53	NW	41W	30W	33W	43W	25WSW	24WSW	29W	55SW	42S	28	
51	W	60SE	31W	25NNW	34SE	32W	27W	25W	23W	21NNW	43SSW	38W	56	W 60
52	S	50NW	35SE	43W	30SW	36W	31W	21SW	22W	27W	17SE	47SW	46	S 50
53	WSW	33W	44SSW	41S	30W	46W	37W	25NNW	25W	25W	42SSW	61NE	39	SSW 61
54	S	51SW	37NW	33SE	31W	35W	32W	33W	27W	28NNE	30S	37SE	37	S 51
55	SE	33SSW	36NNE	33SE	46WSW	29WSW	29WSW	28WSW	20W	24NNW	23SSW	38SSW	60	SSW 60
56	S	40N	51W	33S	43W	34W	31WSW	25WSW	27W	26W	36NNW	35W	28	N 51
57	SSW	45SE	39WSW	34S	44S	30WSW	30W	25W	32W	30ESE	32NNW	34SSW	44	SSW 43
58	SE	38SSW	59SE	46SE	46W	32W	32WSW	34W	29WSW	26W	21NNW	40SE	26	SSW 59
59	SE	48SE	49W	31S	25WNW	31W	33W	26W	26SE	36W	43NNE	29W	36	SE 49
60	SE	34W	55WSW	41W	42W	38W	31W	26W	28W	24W	37SSW	38NNE	42	W 55
61	SSE	26W	32NNW	37S	44W	30W	32W	35W	28W	33NNE	45SSW	37SE	37	NNE 45
62	S	36SE	46NNW	44NNW	36W	39W	37W	25W	28W	28S	40N	24SSE	29	SE 46
63	S	40W	24SE	40S	33W	26W	30W	26W	25W	23S	35S	43NW	25	S 43
64	S	48NE	39NNW	45NNW	40NNW	41SW	33W	31W	35N	30SSE	27NW	44NW	62	NW 62
65	SE	43N	34S	31WNW	43N	34W	38W	24WSW	30NNE	42SW	25W	43SSE	48	SSE 48
66	SE	36NNE	37WNW	29W	31SSW	27W	30W	32W	31W	32N	32SE	36SSE	42	SSE 42
67	SE	52NW	36SSW	50WSW	38WNW	33W	31W	21WSW	20NW	25W	43NE	38NE	51	SE 52
68	SSE	38SE	29S	38S	38W	33W	32W	26W	32W	29SE	29SSE	40SSE	45	SSE 45
69	SSW	52SSE	48W	35SW	33NW	25W	31W	27W	24SSW	23W	36SE	27SE	34	SSW 32
70	SW	43NE	35N	36W	39W	31W	41	SSW	24WSW	30SW	32SE	39SW	38	
71	W	4027	3418	3531	3001	3128	2628	2528	21	31	3113	33		
72	03	3020	2531	2623	2928	25	29	2725	2135	3112	3623	36		
73	13	3712	3133	3203	3226	2926	2626	2926	2324	3813	4016	30	15	40
74	12	3716	3318	3128	3027	2526	2627	2927	2526	3508	3235	39	35	39
MEAN														
S. D.														
TOTAL OBS.														

SURFACE WINDS
(FROM DAILY OBSERVATIONS)

20239	ALAMEDA, CALIFORNIA	43-77
STATION	STATION NAME	YEARS

DAILY PEAK GUSTS IN KNOTS

[illegible]

NAVWEASERVCOM

SURFACE WINDS
(FROM DAILY OBSERVATIONS)

23239 ALAMEDA, CALIFORNIA

45-77

YEARS

DAILY PEAK GUSTS IN KNOTS
/BASED ON LESS THAN 90% OBSERVATIONS FOR MONTH/[illegible]

NAVWEASERVCOM

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JAN
MONTH

ALL WEATHER
CLASS

01
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	10.3	6.5	3.9	.6								21.3	4.5
NNE	1.3	2.6										3.9	3.7
NE		1.3		.6								1.9	8.0
ENE	1.3											1.3	2.0
E	1.3	1.9										3.2	3.2
ESE	3.2	3.2	3.2	2.6								12.3	6.9
SE	1.9	3.2	1.3		1.3							7.7	6.8
SSE	.6	.6	.6	.6								1.3	7.5
S	.6	.6	.6	.6								2.6	6.8
SSW		.6										.6	4.0
SW		.6	1.3									1.9	6.3
WSW	.6		.6									1.3	4.5
W		.6	.6									1.3	8.0
WNW	.6	.6	.6	.6								2.6	7.0
NW	.6	1.3	1.3	1.3								4.5	8.1
NNW		3.9	2.6	.6								7.1	6.5
VARBL													
CALM												25.2	
	22.6	27.1	16.1	7.7	1.3							100.0	4.3

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JAN
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	6.5	3.9	3.9	1.3								15.5	5.3
NNE	2.6	1.3	.6									4.5	3.7
NE	1.3	1.3	.6									3.2	5.0
ENE	1.3	.6	.6	.6								3.2	6.2
E	3.2	3.2	.6									7.1	4.2
ESE	4.5	5.2	2.6									12.3	4.9
SE	1.3	1.3		1.9	.6	.6						4.5	13.1
SSE	1.9	1.9	1.9	1.3								7.1	7.0
S	1.3	1.9										3.2	3.6
SSW		.6										.6	4.0
SW													
WSW	1.3	.6		.6								2.6	7.0
W		.6										.6	4.0
WNW	.6											.6	1.0
NW	1.3	1.9	.6	.6								4.5	5.3
NNW	1.9	4.5	2.6	.6	.6							10.3	6.6
VARBL													
CALM												20.0	
	27.7	29.0	14.2	7.1	1.3	.6						100.0	4.6

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JAN
MONTH

ALL WEATHER
CLASS

07
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.5	8.4	2.6									15.5	4.7
NNE	2.6	1.3		.6								4.5	4.3
NE	1.9		.6									2.6	3.5
ENE		1.9	.6									2.6	6.8
E	3.9											3.9	2.5
ESE	2.6	3.2	1.9									7.7	4.7
SE	1.3	1.9		1.3	1.9							6.5	10.1
SSE	3.2	3.9	1.9	.6	.6							10.3	6.1
S	3.2	1.3		.6								5.2	4.6
SSW	1.3											1.3	2.5
SW		.6		.6								1.3	8.0
WSW		.6	.6	.6								1.9	8.0
W	1.3			.6								1.9	6.0
WNW		.6		2.6								3.2	12.2
NW	1.3	1.3	.6									3.2	4.4
NNW	1.3	4.5	2.6									8.4	5.2
VABBL													
CALM												20.0	
	28.4	29.7	11.6	7.7	2.6							100.0	4.5

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JAN
MONTH

ALL WEATHER
CLASS

10
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.2	5.8	1.3	2.6								12.9	6.5
NNE		.6	.6									1.3	7.0
NE		.6	1.3									1.9	7.3
ENE		1.3	1.3									2.6	6.3
E													
ESE	1.3	2.6										3.9	4.3
SE	1.3	3.9	1.3	1.9	1.3							9.7	8.7
SSE	2.6	4.5	3.2	1.3	.6							12.3	6.8
S	4.5	4.5										9.0	3.4
SSW	.6	2.6										3.2	3.6
SW					.6							.6	20.0
WSW	.6		1.3	1.3								3.2	9.2
W	.6	.6	1.9									3.2	7.4
WNW	1.9	.6										2.6	2.8
NW	.6	3.2	2.6	1.3								7.7	7.1
NNW	2.6	3.9	5.2	1.9								13.5	6.7
VARBL													
CALM												12.3	
	20.0	34.8	20.0	10.3	2.6							100.0	5.7

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

JAN
MONTH

ALL WEATHER
CLASS

13
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.6	5.8	1.3								8.4	9.2
NNE			.6	1.3								1.9	10.7
NE		1.9	.6									2.6	6.0
ENE													
E	1.3		.6	.6								2.6	6.5
ESE		.6										.6	4.0
SE		1.3	2.6			1.3						5.2	11.4
SSE	3.9	2.6	.6									7.1	3.9
S	1.9	2.6	1.9	1.9		.6						9.0	7.8
SSW	3.9	1.9	.6									6.5	3.7
SW	.6	.6										1.3	3.5
WSW	2.6	1.3			.6							4.5	5.6
W	3.2	6.5	3.2	.6								13.5	5.7
WNW	.6	3.2	1.3	.6								5.8	6.1
NW		5.2	4.5	3.9								13.5	8.8
NNW	.6	4.5	7.1	1.3	.6							14.2	7.9
VARBL													
CALM												3.2	
	19.4	32.9	29.7	11.6	1.3	1.9						100.0	6.9

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JAN
MONTH

ALL WEATHER
CLASS

16
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		3.2	2.6	.6	.6	.6						7.7	10.1
NNE			.6	.6								1.3	13.0
NE			.6									.6	8.0
ENE	.6			.6								1.3	7.5
E	1.9		.6	1.3								3.9	6.7
ESE	.6	1.3	.6									2.6	5.3
SE			1.3	.6	.6							2.6	13.3
SSE		.6										.6	4.0
S	2.6	.6	1.9	.6								5.8	6.1
SSW	3.2	2.6	.6									6.5	4.0
SW	2.6	1.3		1.9								5.8	6.7
WSW	.6	1.9	.6	1.3								4.5	6.7
W	3.9	3.2	1.9									9.0	8.0
WNW	.6	3.9	3.9	1.3	.6							10.3	7.8
NW	.6	8.4	9.0		.6							18.7	6.9
NNW	1.9	4.5	5.8	3.2								15.5	7.6
VARBL													
CALM												3.2	
	15.5	32.3	31.6	14.2	2.6	.6						100.0	7.2

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JAN
MONTH

ALL WEATHER
CLASS

19
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.8	7.1	2.6									15.5	4.6
NNE	.6	1.3										1.9	3.3
NIE	1.3											1.3	2.5
ENE	1.3	1.3	.6									3.2	4.4
E	1.9	1.9										3.9	4.0
ESE	.6		.6									1.3	5.0
SE	1.3	1.9	1.3									4.5	5.7
SSE	1.3	.6	.6	.6	.6							3.2	9.0
S	.6	.6	1.9	1.3	.6							4.5	8.6
SSW	.6	.6		.6								1.3	8.0
SW		.6										1.3	4.5
WSW		1.9										1.9	4.3
W		1.9	2.6	1.3								5.8	8.2
WNW	.6	2.6		1.3		.6						5.2	9.4
NW	3.2	7.1	2.6	.6								13.5	5.7
NNW	1.9	4.5	6.5									12.9	6.4
VARBL													
CALM												18.7	
	21.3	33.5	19.4	5.8	.6	.6						100.0	4.9

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JAN
MONTH

22
HOURS (L.S.T.)

ALL WEATHER
CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	6.5	10.3	2.6	1.3	.6							21.3	5.3
NNE	1.9	2.6										4.5	3.9
NE													
ENE		1.9										1.9	5.0
E	1.3	1.9	.6									3.9	4.0
ESE	1.3	3.2	1.9									6.5	4.9
SE	1.3	1.3	1.9	1.9	.6							7.1	8.6
SSE		.6		.6								1.3	8.5
S	.6	.6		.6								1.9	5.7
SSW	.6	.6	.6	.6								2.6	6.5
SW			1.3									1.3	8.0
WSW		1.9	1.3									3.2	6.0
W	.6			.6								1.3	9.0
WNW	1.3	1.3		.6								3.2	5.6
NW	1.3	3.9	1.9	1.3	.6							9.0	7.1
NNW	4.5	4.5	2.6									11.6	4.8
VARBL													
CALM												19.4	
	21.3	34.8	14.8	7.7	1.9							100.0	4.7

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

JAN
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.7	5.7	3.1	1.0	.2	.1						14.8	5.7
NNE	1.1	1.2	.3	.3								3.0	5.1
NE	.6	.6	.5	.1								1.8	5.5
ENE	.6	.9	.4	.2								2.0	5.6
E	1.9	1.1	.3	.2								3.5	4.3
ESE	1.8	2.4	1.4	.3								5.9	5.3
SE	.9	1.9	1.2	1.0	.8	.2						6.0	9.2
SSE	1.7	1.8	1.0	.6	.2							5.4	6.4
S	1.9	1.6	.8	.7		.1						5.2	5.8
SSW	1.2	1.2	.2	.2								2.8	4.3
SW	.5	.5	.3	.3	.1							1.7	7.0
WSW	.7	1.0	.6	.5	.1							2.9	6.6
W	.7	1.8	1.5	.6								4.6	7.0
WNW	.8	1.6	.7	.9	.1	.1						4.2	7.4
NW	1.1	4.0	2.9	1.1	.2							9.4	6.9
NNW	1.9	4.4	4.4	1.0	.2							11.7	6.6
VARBL													
CALM												15.2	
	22.0	31.8	19.7	9.0	1.8	.5						100.0	5.3

TOTAL NUMBER OF OBSERVATIONS

1240

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

FEB
MONTH

ALL WEATHER
CLASS

01
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.1		1.4	1.4								5.0	6.9
NNE	3.5		1.4									5.0	3.7
NE	1.4		.7	.7								2.8	6.0
ENE	.7		.7									1.4	6.5
E	2.1	.7										2.8	2.8
ESE	2.8	2.8	1.4									7.1	5.1
SE	3.5	1.4	.7	.7	.7							7.1	6.2
SSE	2.1	.7	.7	.7								4.3	5.5
S	1.4	3.5	2.1	2.8								9.9	7.5
SSW		.7			.7							1.4	12.0
SW		2.1	.7	.7								3.5	8.2
WSW		1.4	.7									2.1	6.0
W	.7	2.8	1.4	2.1								7.1	7.8
WNW	1.4	.7		.7								2.8	5.5
NW	3.5		1.4									5.0	3.4
NNW	2.8	4.3	2.8	.7								10.6	4.9
VARBL													
CALM												22.0	
	28.4	21.3	16.3	10.6	1.4							100.0	4.6

TOTAL NUMBER OF OBSERVATIONS

141

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

FEB
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.0	5.0	2.1	2.1								14.2	5.7
NNE	.7	.7										1.4	4.0
NE	2.8	.7	.7									4.3	3.5
ENE			1.4									1.4	8.5
E	2.1	1.4										3.5	3.2
ESE	2.1	4.3	2.8	.7								9.9	6.0
SE		4.3	1.4	.7	.7							7.1	7.4
SSE	.7	1.4	1.4	1.4								5.0	8.6
S	.7	1.4	1.4	2.1								5.7	7.6
SSW	2.1	2.8	1.4									6.4	4.6
SW	1.4	1.4	.7									3.5	5.2
WSW	.7		2.1	.7								3.5	7.8
W	.7	1.4		.7								2.8	7.0
WNW	2.1	2.1	2.1		.7							7.1	6.4
NW	2.1	1.4										3.5	3.6
NNW	.7	2.8		.7								4.3	6.2
VARB													
CALM												16.3	
	24.1	31.2	17.7	9.2	1.4							100.0	5.0

TOTAL NUMBER OF OBSERVATIONS

141

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

FEB
MONTH

ALL WEATHER
CLASS

07
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.7	4.3	2.1	1.4								13.5	4.9
NNE	2.1	1.4	1.4									5.0	4.7
NE				.7								.7	12.0
ENE	.7	1.4										2.1	4.3
E	1.4	2.8	.7									5.0	4.6
ESE	3.5	4.3	5.7	.7								14.2	6.0
SE	.7	1.4		2.1								4.3	9.0
SSE	2.8	.7	1.4	1.4								6.4	6.7
S	1.4	2.1	1.4	.7								5.7	6.3
SSW	.7	.7	.7	.7								2.8	7.0
SW	.7	.7										1.4	4.5
WSW	.7	.7										1.4	3.0
W	.7	3.5		.7								5.0	6.1
WNW		1.4	.7	1.4	1.4							5.0	11.9
NW		1.4		1.4								2.8	9.5
NNW			2.1									2.1	7.7
VARBL													
CALM												22.7	
	21.3	27.0	16.3	11.3	1.4							100.0	4.9

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

FEB
MONTH

ALL WEATHER
CLASS

10
HOURS (L.S.T.)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.1	4.3	.7	2.1								9.2	7.2
NNE	.7	1.4										2.1	4.0
NIE			.7	.7								1.4	11.0
ENE			.7									.7	8.0
E			2.1									2.1	7.7
ESE	2.1	.7	2.1	1.4								6.4	6.7
SE	.7	5.0	2.8	2.1	.7							11.3	7.9
SSE		2.8	1.4	.7		.7						5.7	8.6
S	6.4	5.7	3.5	1.4	.7							17.7	5.7
SSW	1.4	3.5										5.0	4.3
SW	.7		.7									1.4	5.0
WSW		.7	1.4									2.1	7.0
W	.7	2.8	2.1									5.7	6.0
WNW		.7	.7	.7								2.1	10.0
NW	1.4	2.8	1.4	.7								6.4	6.2
NNW	.7	4.3	3.5	2.8	.7							12.1	8.8
VARBL													
CALA												8.5	
	17.0	34.8	24.1	12.8	2.1	.7						100.0	6.4

TOTAL NUMBER OF OBSERVATIONS

141

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

FEB
MONTH

ALL WEATHER
CLASS

13
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	4.3	4.3									9.2	6.2
NNE			.7									.7	8.0
NE													
ENE													
E		.7	.7										
ESE			2.1	.7	.7							1.4	6.5
SE	2.1	.7	2.1	.7								3.5	12.8
SSE	2.1	2.1	.7									5.7	6.6
S	3.5	5.0	1.4	3.5	.7	.7						5.7	6.3
SSW	2.8	1.4	.7									14.2	7.3
SW	2.8	.7		.7								5.0	3.6
WSW	2.1	2.8	2.8									4.3	4.0
W	2.8	7.1	5.7	1.4	.7							7.8	5.4
WNW	.7	3.5	4.3	1.4	.7							17.7	6.8
NW		2.1	2.8	.7								10.6	8.5
NNW	1.4		2.1	2.8	.7							5.7	7.3
VARBL												7.1	10.9
CALM												1.4	
	21.3	30.5	30.5	12.1	3.5	.7						100.0	7.0

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

FEB
MONTH

ALL WEATHER
CLASS

16
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		2.1	1.4	.7								4.3	8.0
NNE	1.4											1.4	2.0
NE			.7									.7	8.0
ENE													
E		.7										.7	6.0
ESE				.7								.7	16.0
SE			1.4	1.4	.7							2.1	12.0
SSE	1.4		1.4	1.4	.7							5.0	9.4
S	2.8	3.5	1.4	1.4	.7							9.9	7.1
SSW	1.4	1.4	.7									2.1	6.3
SW	.7		.7									2.1	4.7
WSW			4.3	1.4								6.4	8.0
W	2.1	7.8	8.5	6.4	2.1							27.0	8.6
WNW		2.8	6.4	2.8								12.1	9.1
NW		2.1	8.5	2.8	.7							14.2	9.1
NNW	1.4	2.1	3.5	1.4	.7							9.2	8.4
VARBL													
CALM												2.1	
	11.3	22.7	39.0	19.1	5.7							100.0	8.2

TOTAL NUMBER OF OBSERVATIONS

141

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

FEB
MONTH

ALL WEATHER
CLASS

19
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.5	2.1	1.4	.7								7.8	4.7
NNE		1.4	.7									2.1	6.3
NE	.7	.7	.7									2.1	5.3
ENE			.7									.7	8.0
E	.7	.7	1.4									2.8	5.8
ESE	1.4		.7		.7							2.8	8.0
SE			.7	1.4								2.1	12.7
SSE	.7	.7		1.4	.7	.7						4.3	12.8
S	1.4	2.1	1.4	2.8								7.8	8.4
SSW	.7			.7								1.4	7.5
SW	1.4											1.4	1.5
WSW	.7	2.8										3.5	4.4
W	6.4	9.9	7.8	1.4								25.5	6.1
WNW	2.8	2.8	2.1	1.4								9.2	6.6
NW	1.4	4.3	2.8	1.4								9.9	7.0
NNW	3.5	4.3	2.1	2.1								12.1	5.9
VARBL													
CALM												4.3	
	25.5	31.9	22.7	13.5	1.4	.7						100.0	6.4

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

STATION
23239

STATION NAME
ALAMEDA, CALIFORNIA

YEARS
73-77

MONTH
FEB

CLASS

ALL WEATHER

HOURS (L.S.T.)
22

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.3	4.3	2.1	.7								11.3	4.9
NNE	2.1	1.4										3.5	2.8
NE	.7											.7	3.0
ENE	.7	1.4										2.1	4.3
E	2.8											2.8	1.8
ESE	.7	1.4	2.8									5.0	6.7
SE	2.1	.7		.7								3.5	4.0
SSE	.7	1.4	.7	.7								3.5	7.0
S	.7	2.1	1.4	2.8	.7							7.8	9.6
SSW	.7	1.4	.7	.7								3.5	7.4
SW	.7	.7	.7	.7								2.1	7.0
WSW	.7	4.3		.7								5.7	5.5
W	2.1	5.0	.7	.7								8.5	5.4
WNW	1.4	1.4	.7	2.8								6.4	8.2
NW	3.5	2.1	1.4	.7								7.8	5.3
NNW	2.8	2.1	2.1	1.4								8.5	6.6
VARBL													
CALM												17.0	
	27.0	29.1	13.5	12.8	.7							100.0	5.0

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

FEB
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.9	3.3	2.0	1.2								9.3	5.8
NNE	1.3	.8	.5									2.7	4.1
NE	.7	.2	.4	.3								1.6	5.9
ENE	.3	.4	.4									1.1	6.0
E	1.2	.9	.6									2.7	4.4
ESE	1.6	1.7	2.2	.5	.2							6.2	6.8
SE	1.2	1.7	1.2	1.1	.4							5.4	7.6
SSE	1.3	1.2	1.0	1.0	.2	.3						5.0	8.0
S	2.3	3.2	1.8	2.2	.4							9.8	7.2
SSW	1.1	1.5	.5	.3	.1							3.5	5.6
SW	1.2	.6	.4	.3								2.5	5.3
WSW	.7	1.0	1.4	.4								4.1	6.1
W	2.0	5.1	3.3	1.7	.4							12.4	7.0
WNW	1.1	2.0	2.1	1.4	.4							6.9	8.2
NW	1.5	2.0	2.3	1.0	.1							6.9	6.8
NNW	1.7	2.5	2.3	1.5	.3							8.2	7.3
VARBL													
CALM												11.8	
	22.0	28.5	22.5	12.7	2.2	.3						100.0	5.9

TOTAL NUMBER OF OBSERVATIONS

1128

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAR
MONTH

ALL WEATHER
CLASS

01
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	1.3	2.6	1.3								6.5	7.7
NNE	1.3	.6	1.9		.6							4.5	7.1
NE		1.3										1.3	5.5
ENE	1.9	.6										2.6	2.8
E	3.2	2.6	.6									6.5	3.6
ESE		3.2	.6	.6								4.5	6.6
SE		.6	.6	1.3								2.6	9.8
SSE	.6	.6	1.3									2.6	5.3
S	2.6	1.3	3.2	1.9		.6						9.7	7.9
SSW	1.9	3.2	.6									5.8	4.7
SW	.6	2.6										3.2	4.6
WSW	.6	2.6	1.3	.6								5.2	6.3
W	1.9	4.5	7.7	2.6	.6							17.4	7.9
WNW	1.3	3.2	3.9	1.3								9.7	7.3
NW		2.6	1.3	1.9								5.8	8.4
NNW	.6		.6	2.6	.6							4.5	13.0
VARBL													
CALM												7.7	
	18.1	31.0	26.5	14.2	1.9	.6						100.0	6.6

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

MAR
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

0900

TOTAL NUMBER OF OBSERVATIONS

155

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		1.9	2.6	2.6								7.1	9.5
NNE		.6	1.9	1.3								3.9	9.3
NE	.6	.6										1.3	3.5
ENE	1.3											1.3	1.5
E	3.2	4.5	.6									8.4	3.9
ESE	1.9	2.6	1.9									6.5	5.2
SE	1.9	1.9	1.3	1.3	.6							7.1	7.5
SSE	.6	1.3	1.9	.6	.6							4.5	8.3
S	.6	.6	.6	1.9								3.9	8.8
SSW	.6	.6	1.3									2.6	6.3
SW	1.9	3.9	1.3	.6								7.7	5.5
WSW	1.3	3.9	.6									5.8	4.7
W		.6	4.5	1.3								6.5	9.2
WNW		5.2	3.2	.6		.6						9.7	7.8
NW	.6	2.6		1.9								5.2	8.3
NNW		1.3	1.3	3.2								5.8	10.1
VARB													
CALM												12.9	
	14.8	32.3	23.2	14.8	1.3	.6						100.0	6.2

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

MAR
MONTH

ALL WEATHER
CLASS

07
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.2	3.2	1.9	1.3								9.7	5.6
NNE	.6	1.3	1.3	.6								3.9	7.2
NE	1.3		.6									1.9	3.7
ENE	.6	.6	.6									1.9	3.0
E	1.9	3.2										5.2	3.3
ESE	1.3	3.2	.6	1.3	.6							7.1	6.6
SE	1.3	2.6	2.6	1.3								7.7	7.5
SSE		1.9	3.9	1.3								7.1	8.4
S	1.3	1.3	.6	2.6	.6							6.5	9.0
SSW	.6	1.3	1.3									3.2	5.6
SW	1.3	1.3	1.3									3.9	5.3
WSW	1.3	1.3	.6	.6								3.9	5.3
W		2.6	1.3									3.9	6.0
WNW	1.3	1.3		2.6	.6							5.8	9.6
NW	.6	.6	.6	2.6								4.5	9.1
NNW	.6	1.9	4.5	1.9	.6							9.7	9.1
VARBL													
CALM												14.2	
	17.4	27.7	21.9	16.1	2.6							100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAR
MONTH

ALL WEATHER
CLASS

10
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	2.6	2.6	1.9	.6							8.4	9.2
NNE		1.3	.6	1.3								3.2	9.0
NE	.6		.6									1.3	4.0
ENE			.6									.6	7.0
E	.6											.6	2.0
ESE		.6	.6	.6								1.9	9.3
SE		1.9	1.9	3.9								7.7	9.7
SSE	.6	5.2	2.6									8.4	5.5
S	3.9	3.9	2.6	3.2								13.5	7.0
SSW	1.9	4.5	1.9	.6								9.0	5.6
SW	.6	1.9	.6									3.2	4.6
WSW	2.6	1.3		.6								4.5	4.4
W	3.9	1.3	2.6	.6								8.4	6.3
WNW	.6	2.6	1.9	.6								5.8	6.7
NW	1.3	4.5	3.9		1.9							11.6	8.1
NNW		2.6	3.2	2.6	1.9							10.3	10.4
VARB													
CALM												1.3	
	17.4	34.2	26.5	15.5	5.2							100.0	7.3

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

STATION 23239 ALAMEDA, CALIFORNIA STATION NAME YEARS 73-77 MONTH MAR HOURS (L.S.T.) 13

ALL WEATHER
CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	.6			.6								1.3	9.5
NNE			1.3	.6								2.6	12.8
NE													
ENE													
E		.6										.6	10.0
ESE		.6		1.3								1.9	10.3
SE		1.3		.6								1.9	7.7
SSE	1.3	1.9	.6	1.9								5.8	7.0
S	1.9	2.6	1.3	1.9		1.3						9.0	9.4
SSW	.6	.6	.6	.6								2.6	9.0
SW	1.3	.6	.6	1.3	.6							4.3	9.3
WSW	.6	3.9	4.5	1.9								11.0	7.9
W	1.3	6.5	8.4	11.0	1.9							29.0	9.9
WNW	1.3	2.6	5.8	1.9	1.3							12.9	8.8
NW	.6	4.5	1.9	1.3	.6							9.0	7.8
NNW		1.9	2.6	1.9	1.3							7.7	10.5
VARB													
CALM												.0	
	9.7	27.1	28.4	26.5	7.1	1.3						100.0	9.2

TOTAL NUMBER OF OBSERVATIONS 155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAR
MONTH

ALL WEATHER
CLASS

16
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N			.6	.6								1.3	10.5
NNE			.6	.6								.6	10.0
NE			.6									.6	9.0
ENE	.6											.6	3.0
E	.6											.6	3.0
ESE			.6	.6								1.3	10.5
SE													
SSE		1.3			.6							1.9	10.0
S		.6	2.6	1.9	1.3	.6						7.1	13.1
SSW		.6	1.9	.6								3.2	9.6
SW	.6		1.3									1.9	6.7
WSW		.6	4.5	1.3								6.5	8.6
W	1.3	2.6	11.6	25.8	1.9	.6						43.9	11.7
WNW		1.3	3.2	10.3	1.9							16.8	12.5
NW		1.3	4.5	2.6	.6							9.0	10.1
NNW			.6	3.2	.6							4.5	12.9
VARBL													
CALM												.0	
	3.2	8.4	32.9	47.1	7.1	1.3						100.0	11.3

TOTAL NUMBER OF OBSERVATIONS

155

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

ALAMEDA, CALIFORNIA

73-77

MAR

STATION NAME

YEARS

MONTH

ALL WEATHER

19

CLASS

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	2.6		2.6								5.8	8.0
NNE			.6									.6	9.0
NE													
ENE	.6	.6										1.3	4.0
E													
ESE	.6	.6										1.3	4.0
SE													
SSE				.6	1.3							1.9	16.7
S			3.2	2.6	.6							6.5	11.3
SSW			1.9									1.9	8.3
SW	.6	.6	1.3	1.9								3.9	9.8
WSW	.6	1.9	5.8	.6								9.0	8.2
W	.6	5.2	10.3	13.5	.6							30.3	10.0
WNW	1.3	4.5	5.2	4.5	1.3							16.8	8.9
NW	1.3	3.9	4.5	1.9	.6							12.3	8.2
NNW	1.3	1.3	1.3	2.6	.6							7.1	8.8
VARB.													
CALM												1.3	
	7.1	21.3	34.2	31.0	4.5	.6						100.0	9.1

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAR
MONTH

ALL WEATHER
CLASS

22
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	2.6	2.6	2.6	.6							10.3	8.3
NNE	.6	1.3	.6	.6								3.2	6.4
NE													
ENE		.6										.6	4.0
E	.6	.6	.6									1.9	5.3
ESE	.6	.6										1.3	3.5
SE		1.3		1.3								2.6	8.5
SSE			3.9	.6	.6							5.2	11.0
S		1.9	1.3	.6	.6							3.9	8.3
SSW	.6	1.3	1.9	.6								4.5	7.6
SW		1.9	.6									2.6	6.3
WSW	1.9	1.9	1.3									5.2	5.1
W	3.2	5.8	12.3	3.2	1.3							25.8	8.1
WNW	1.9		4.5	3.2								9.7	8.6
NW		1.3	3.9	.6	.6							6.5	9.3
NNW	1.3	3.2	.6	3.2	.6							9.0	8.6
VARBL													
CALM												7.7	
	12.9	24.5	34.2	16.1	4.5							100.0	7.4

TOTAL NUMBER OF OBSERVATIONS

159

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAR
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	1.8	1.6	1.7	.2							6.3	8.1
NNE	.3	.6	1.1	.6	.2							2.8	8.5
NE	.3	.2	.2									.8	4.6
ENE	.6	.3	.2									1.1	3.6
E	1.3	1.4	.3									3.0	3.9
ESE	.6	1.5	.6	.6	.1							3.2	6.7
SE	.4	1.2	.8	1.2	.1							3.7	8.3
SSE	.4	1.5	1.8	.6	.4							4.7	8.2
S	1.3	1.5	1.9	2.0	.4	.3						7.5	9.1
SSW	.8	1.5	1.5	.2	.1							4.1	6.6
SW	.8	1.6	.9	.5	.1							3.9	6.5
WSW	1.1	2.2	2.3	.7								6.4	6.7
W	1.5	3.6	7.3	7.2	.8	.2						20.6	9.6
WNW	1.0	2.6	3.5	3.1	.6	.1						10.9	9.1
NW	.6	2.7	2.6	1.6	.6							8.0	8.6
NNW	.5	1.5	1.9	2.7	.8							7.3	10.1
VARBL													
CALM												5.6	
	12.6	25.8	28.5	22.7	4.3	.6						100.0	7.9

TOTAL NUMBER OF OBSERVATIONS

1240

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

01
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	2.0	1.3	.7								4.7	6.3
NNE	1.3											1.3	2.5
NE													
ENE													
E													
ESE	2.0	.7	.7									3.3	4.2
SE	1.3	.7	1.3									3.3	4.8
SSE	1.3	1.3		2.0								3.3	9.6
S	.7	.7	2.7	1.3								5.3	8.1
SSW	2.0	2.0	2.0	.7								6.7	5.8
SW	1.3	3.3	2.0	.7								7.3	6.0
WSW	.7	4.7	2.7	.7								8.7	6.5
W	2.7	5.3	6.0	4.7								18.7	7.2
WNW	2.7	2.7	2.7									8.0	5.5
NW	2.0	1.3	3.3	2.7								9.3	7.6
NNW	1.3	1.3	.7	2.0	.7							6.0	8.4
VARBL													
CALM												14.0	
	18.7	26.0	25.3	15.3	.7							100.0	5.8

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	3.3	2.7	2.0								8.7	7.5
NNE													
NE	.7											.7	1.0
ENE	2.7											2.7	2.0
E	2.7	1.3										4.0	3.3
ESE	2.7	1.3	.7									4.7	4.0
SE		1.3		.7								2.0	7.3
SSE	1.3		.7	1.3	.7							4.0	9.7
S	2.0	2.7	3.3									8.0	5.9
SSW		2.0	1.3									3.3	6.2
SW		4.0	1.3	1.3								6.7	7.0
WSW	.7	4.0	2.0									6.7	6.1
W		2.7	8.7	2.7								14.0	8.4
WNW		3.3	1.3									4.7	6.1
NW	1.3	1.3	2.0	2.7								7.3	8.8
NNW	2.0	.7	2.7	1.3	.7							7.3	7.6
VARBL													
CALM												15.3	
	16.7	28.0	26.7	12.0	1.3							100.0	5.8

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

07
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.0	1.3	4.7	2.0	.7							10.7	8.5
NNE		1.3										1.3	5.0
NE													
ENE	.7		.7									1.3	5.0
E	4.0	1.3	.7									6.0	2.9
ESE	2.7	2.7	1.3									6.7	4.1
SE	.7	2.7	1.3	1.3								6.0	6.7
SSE	1.3	2.0	.7		.7							4.7	6.6
S		2.0	2.0									4.0	7.8
SSW	.7	2.7	2.7									6.0	6.0
SW		1.3	1.3	.7								3.3	7.8
WSW	2.0	2.0	2.0									6.0	5.2
W	.7	3.3	5.3	1.3								10.7	7.8
WNW	.7	2.0	1.3	.7		.7						5.3	6.6
NW	1.3	2.0	.7	1.3								5.3	7.0
NNW	1.3		2.0	3.3	.7							7.3	10.5
VARBL													
CALM												15.3	
	18.0	26.7	26.7	10.7	2.0	.7						100.0	5.9

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

10
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	.7	.7	.7	1.3	.7						4.7	11.4
NNE		.7		.7								1.3	10.0
NE													
ENE													
E													
ESE													
SE		.7	.7									1.3	7.0
SSE	2.0	4.0	1.3		.7							8.0	6.1
S	6.0	6.7	4.0									16.7	4.8
SSW	2.7	2.0	2.0									6.7	4.9
SW	2.7	4.7	1.3	.7								9.3	5.4
WSW	2.7	7.3	4.0	1.3								13.3	5.7
W	.7	6.7	4.7	1.3								13.3	7.1
WNW		2.0	1.3	.7								4.0	7.5
NW	1.3	2.0	.7	2.0	.7							6.7	8.6
NNW	1.3	.7	4.0	2.7	.7							9.3	9.5
VARB													
CALM												3.3	
	20.7	38.0	24.7	9.3	3.3	.7						100.0	6.4

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

13
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.7	1.3									2.0	6.7
NNE				.7	.7							1.3	16.0
NE													
ENE													
E													
ESE													
SE				.7								.7	16.0
SSE		.7	2.7									.7	5.0
S		2.7	2.7									5.3	6.4
SSW		.7	1.3									2.0	7.3
SW		1.3	4.0	.7								6.0	8.9
WSW	1.3	3.3	6.0	4.0	.7							15.3	9.0
W	1.3	1.3	14.0	12.7	2.0							31.3	10.5
WNW	.7	3.3	13.3	6.7		.7						24.7	9.9
NW		2.0	3.3	2.7								8.0	9.0
NNW			.7		1.3							2.0	14.3
VARBL													
CALM												.7	
	3.3	16.0	46.7	28.0	4.7	.7						100.0	9.6

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

16
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N				1.3								1.3	12.0
NNE													
NE													
ENE													
E													
ESE													
SE													
SSE		.7										.7	6.0
S		.7			.7							1.3	12.5
SSW			1.3	.7	.7							2.7	12.0
SW		.7	.7	.7								2.0	8.7
WSW		2.0	5.3	6.0	.7							14.0	11.2
W		4.0	18.0	25.3	6.0							53.3	12.1
WRW		.7	5.3	8.7	1.3	.7						16.7	11.8
NW		.7	2.7	2.7								6.0	10.4
NNW		1.3		.7								2.0	8.7
VARBL												.0	
CALM													
		10.7	33.3	46.0	9.3	.7						100.0	11.6

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

19
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		1.3	.7									2.0	6.3
NNE													
NE		.7										.7	6.0
ENE													
E													
ESE													
SE													
SSE													
S			2.0	.7								2.7	9.3
SSW		1.3	3.3									4.7	8.0
SW	.7	.7	2.7	1.3								5.3	8.9
WSW		3.3	3.3	1.3								8.0	8.3
W	1.3	4.7	14.7	21.3	2.0	.7						44.7	10.7
WNW		3.3	6.0	7.3	.7							19.3	10.3
NW		2.7	2.0		.7							5.3	8.0
NNW		4.7	2.0									6.7	5.8
VARB													
CALM												.7	
	2.0	22.7	38.7	32.0	2.7	1.3						100.0	9.5

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

22
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.7	2.7	2.0									7.3	4.8
NNE													
NE													
ENE													
E													
ESE			.7									.7	7.0
SE				.7								.7	11.0
SSE													
S	.7	1.3	1.3	1.3								4.7	7.9
SSW	1.3	.7	3.3									5.3	6.4
SW	1.3	2.7	2.7									4.0	5.8
WSW	2.7	5.3	5.3	2.0								15.3	6.7
W	4.0	7.3	11.3	5.3								28.0	7.6
WNW	1.3	3.3	2.7	4.0								11.3	8.4
NW	2.7	2.0	2.0	2.7								9.3	8.2
NNW		1.3	4.0	.7								6.0	7.6
VARB													
CALM												7.3	
	16.7	24.0	35.3	16.7								100.0	6.8

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	1.5	1.7	.7	.2	.1						5.2	7.6
NNE	.2	.2		.2	.1							.7	8.4
NE	.1	.1										.2	3.5
ENE	.4											.5	3.0
E	.8	.3	.1									1.2	3.1
ESE	.9	.6	.4									1.9	4.2
SE	.2	.7	.4	.4								1.7	7.0
SSE	.6	1.1	.3	.4	.2							2.7	7.4
S	1.2	2.1	2.2	.4	.1							6.0	6.5
SSW	.8	1.4	2.2	.2	.1							4.7	6.6
SW	.7	2.0	2.0	.7								5.5	7.0
WSW	1.2	4.0	3.8	1.9	.2							11.2	7.6
W	1.3	4.4	10.3	9.3	1.2	.1						26.7	9.8
WNW	.7	2.6	4.5	3.5	.2	.3						11.7	9.4
NW	1.1	1.7	2.1	2.1	.2							7.2	8.5
NNW	.7	1.2	2.0	1.3	.5							5.8	8.6
VARBL													
CALM												7.1	
	12.0	24.0	32.2	21.2	3.0	.5						100.0	7.7

TOTAL NUMBER OF OBSERVATIONS

1200

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

01
HOURS (L.S.T.)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6			.6								1.3	8.0
NNE													
NE													
ENE	.6											.6	2.0
E	1.3											1.3	2.0
ESE	.6											.6	2.0
SE	1.3											1.3	1.5
SSE	1.3											1.3	2.3
S	1.9	.6	1.3									3.9	5.3
SSW	1.9	1.3	2.6									5.8	5.8
SW	3.2	2.6	5.8	1.9								13.6	6.9
WSW	.6	4.5	6.5	1.3	.6							13.6	8.5
W	3.9	5.8	11.0	7.1	.6							28.6	8.2
WNW	1.3	1.9	4.5	1.9	.6							10.4	8.8
NW	1.3	2.6	.6	.6								5.2	5.8
NNW	.6	1.3	.6	1.3								3.9	7.2
VARBL													
CALM												8.4	
	20.8	20.8	33.1	14.9	1.9							100.0	6.7

TOTAL NUMBER OF OBSERVATIONS

154

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.6		.6								1.9	7.0
NNE	.6											.6	2.0
NE		.6										.6	5.0
ENE	.6											.6	1.0
E	1.9	1.3	.6									3.9	4.2
ESE	.6	2.6										3.2	4.6
SE		1.9										1.9	4.7
SSE	.6		1.3									1.9	6.3
S	1.3	1.3	.6									3.2	4.8
SSW	1.3	3.2	1.3	1.3								7.1	6.9
SW	.6	2.6	2.6	1.9								7.7	7.8
WSW	1.3	7.1	5.8	1.9								16.1	6.9
W	4.5	2.6	7.7	4.5	1.3							20.6	8.3
WNW	.6	1.9	2.6	1.3	.6							7.1	9.0
NW	.6	2.6	.6	.6	.6							5.2	7.9
NNW	.6	2.6		.6								3.9	5.3
VARB													
CALM												14.2	
	16.1	31.0	23.2	12.9	2.6							100.0	6.0

TOTAL NUMBER OF OBSERVATIONS

155

AD-A060 998

NAVAL WEATHER SERVICE DETACHMENT / SHEVILLE N C
SUMMARY OF METEOROLOGICAL OBSERVATIONS, SURFACE (SMOS), ALAMEDA--ETC(U)
JUN 78

F/G 4/2

UNCLASSIFIED

NL

2 OF 4

AD
A060998



NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

ALL WEATHER
CLASS

MAY
MONTH

07
HOURS (L.S.T.)

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		1.3	1.3	.6								3.2	8.2
NNE	.6	.6	1.3									2.6	5.8
NE													
ENE													
E													
ESE		.6	.6									1.3	7.0
SE	.6	2.6	.6									3.9	5.0
SSE	1.3	1.9	1.3									4.5	4.7
S	1.9	5.2	.6									7.7	4.5
SSW	2.6		1.3	1.3								5.2	6.6
SW	2.6	3.2	1.9	1.3								9.0	6.4
WSW	1.9	3.2	1.9	1.9								9.0	7.1
W	3.2	6.5	9.7	4.5								23.9	7.5
WNW	1.3	4.5	.6	.6								7.1	5.8
NW		1.3		.6								1.9	7.0
NNW	1.3	.6	.6	1.3								3.9	7.0
VARBL													
CALM												16.8	
	17.4	31.6	21.9	12.3								100.0	5.4

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

10
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		1.3	.6	1.3								3.2	9.4
NNE													
NE													
ENE													
E													
ESE	.6											.6	3.0
SE	1.3	.6	.6									2.6	4.5
SSE	2.6	1.9	1.3									5.8	4.7
S	5.8	7.7	2.6									16.1	4.5
SSW	3.2	5.8	1.3									10.3	4.6
SW	3.2	2.6	3.2	3.9								12.9	7.4
WSW	1.9	5.2	5.8	1.3								14.2	6.5
W	1.9	2.6	5.2	9.0								18.7	9.4
WNW	.6	1.9	1.9	1.9	.6							6.5	7.9
NW		1.3	1.3	1.9								5.2	10.4
NNW	.6	.6	.6									1.9	5.3
VARB													
CALM												1.9	
	21.9	31.6	24.5	19.4	.6							100.0	6.7

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

13
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N					1.3							1.3	18.5
NNE													
NE													
ENE		.6										.6	6.0
E													
ESE													
SE													
SSE													
S		1.3	.6									1.9	7.0
SSW			.6									.6	10.0
SW		.6	4.5	1.9								7.1	9.9
WSW		2.6	9.7	3.9	.6							16.8	9.5
W	.6	1.3	14.8	24.5	3.9	1.9						47.1	12.1
WNW	.6	.6	5.2	11.0	1.3							18.7	12.0
NW		2.6	1.9	.6								5.2	7.4
NNW				.6								.6	11.0
VARBL													
CALM												.0	
	1.3	9.7	37.4	42.6	7.1	1.9						100.0	11.2

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

16
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N			.6		.6							1.3	13.5
NNE													
NE													
ENE													
E													
ESE													
SE													
SSE			.6									.6	7.0
S													
SSW			.6									.6	10.0
SW	1.9	1.3	1.3	.6								3.9	7.5
WSW	1.3	3.9	6.5	2.6								14.2	12.1
W	1.3	11.6	33.5	11.0	4.5							61.9	14.0
WNW		2.6	6.5	3.2	1.3							13.5	13.7
NW		1.9	.6			.6						3.2	13.0
NNW		.6										.6	7.0
VARB													
CALM												.0	
	4.5	23.9	47.7	17.4	6.5							100.0	13.3

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

19
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.6	.6									1.3	6.0
NNE			.6									.6	7.0
NE													
ENE													
E													
ESE													
SE													
SSE													
S			.6									.6	8.0
SSW			.6									.6	8.0
SW		.6	2.6									3.2	8.6
WSW		1.3	7.7	8.4	1.3							18.7	11.1
W	1.3	3.9	15.5	31.0	6.5	.6						58.7	12.1
WNW	1.9	1.3	3.2	3.9								10.3	8.8
NW	.6	.6	.6	1.3	.6							3.9	10.7
NNW		1.3		.6								1.9	6.7
VARBL													
CALM												.0	
	3.9	9.7	32.3	45.2	8.4	.6						100.0	11.1

TOTAL NUMBER OF OBSERVATIONS

135

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

22
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.6										1.3	3.0
NNE		1.3										1.3	4.0
NE													
ENE													
E													
ESE		1.3										1.3	5.0
SE	.6											.6	3.0
SSE													
S	.6	1.9										2.6	5.0
SSW		1.3	.6									1.9	5.7
SW	1.9	5.2	4.3	1.9								13.5	6.6
WSW	2.6	8.4	12.9	3.2								27.1	7.2
W	2.6	3.9	11.0	12.9	1.9							32.3	9.9
WNW		1.3	3.9	1.9	1.3							8.4	10.4
NW	1.3	1.3	.6	.6								3.9	6.7
NNW	.6		.6	1.3								2.6	9.8
VARB													
CALM												3.2	
	11.0	26.5	34.2	21.9	3.2							100.0	7.8

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.2	.6	.4	.4	.2							1.9	9.0
NNE	.2	.2	.2									.6	5.0
NE		.1										.1	5.0
ENE	.2	.1										.2	3.0
E	.4	.2	.1	.1								.6	3.6
ESE	.2	.6	.1	.1								.9	4.7
SE	.5	.6	.2									1.3	4.3
SSE	.7	.5	.6									1.8	4.8
S	1.5	2.3	.8									4.5	4.8
SSW	1.1	1.5	1.1	.3								4.0	6.0
SW	1.5	2.4	3.3	1.7								8.9	7.4
WSW	1.0	4.2	6.8	3.6	.6							16.2	8.6
W	2.3	3.5	10.8	15.9	3.1	.9						36.5	11.1
WNW	.8	1.7	3.1	3.6	.9	.2						10.3	10.2
NW	.5	1.5	1.0	.9	.2	.1						4.2	8.5
NNW	.5	.8	.4	.7								2.4	7.0
VARB													
CALM												5.6	
	11.5	20.7	28.8	27.1	5.2	1.1						100.0	8.5

TOTAL NUMBER OF OBSERVATIONS

1239

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUN
MONTH

ALL WEATHER
CLASS

01
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	.7										2.0	2.7
NNE	1.3											1.3	2.0
NE													
ENE													
E													
ESE	1.3	1.3										2.7	3.3
SE													
SSE													
S													
SSW	.7	2.0	2.0	.7								5.3	7.3
SW	.7	2.0	7.3	1.3								11.3	8.2
WSW	2.0	6.7	8.7	4.7								22.0	7.9
W	3.3	8.7	10.0	9.3	2.0							33.3	8.8
WNW	2.0	1.3	.7	1.3								5.3	6.5
NW	1.3	2.7										4.0	3.5
NNW			.7									.7	10.0
VARBL													
CALM												12.0	
	14.0	25.3	29.3	17.3	2.0							100.0	6.7

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEAR

JUN
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.0	1.3										3.3	2.8
NNE	1.3											1.3	1.5
NE	.7	.7										1.3	4.0
ENE	.7											.7	3.0
E	1.3											1.3	3.0
ESE	.7											.7	2.0
SE													
SSE	.7	2.0										2.7	4.5
S	2.0											2.0	2.3
SSW	1.3	1.3	2.7									5.3	6.8
SW	1.3	4.0	3.3	1.3								10.0	6.9
WSW	2.0	6.0	7.3	4.0								19.3	7.6
W	4.0	7.3	9.3	5.3								26.0	7.6
WNW	2.0	3.3	4.0									9.3	5.9
NW	3.3	1.3										4.7	2.4
NNW	1.3											1.3	3.0
VARB													
CALM												10.7	
	24.7	27.3	26.7	10.7								100.0	5.6

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUN
MONTH

ALL WEATHER
CLASS

07
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.0	1.3										5.3	3.1
NNE													
NE													
ENE													
E													
ESE	1.3	.7										2.0	3.0
SE													
SSE	.7	2.0										2.7	4.5
S	2.0	2.0	1.3									5.3	4.6
SSW	3.3	1.3										4.7	3.0
SW	2.0	3.3	2.0	.7								8.0	5.8
WSW	2.7	8.0	9.3	1.3								21.3	6.4
W	4.0	6.0	10.0	1.3	.7							22.0	7.1
WNW	.7	.7	3.3									4.7	6.9
NW		2.7	.7									3.3	5.4
NNW	1.3	2.7		.7								4.7	5.6
VARBL													
CALA												16.0	
	22.0	30.7	26.7	4.0	.7							100.0	4.9

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUN
MONTH

ALL WEATHER
CLASS

10
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7		.7									1.3	5.0
NNE													
NE													
ENE													
E													
ESE													
SE	1.3											1.3	2.5
SSE		1.3										1.3	4.5
S	3.3	5.3	.7									9.3	4.3
SSW	2.0	2.7	.7									5.3	4.8
SW	2.7	4.0	3.3	.7								10.7	5.5
WSW	4.7	8.0	7.3	4.0								24.0	6.7
W	3.3	5.3	13.3	3.3								25.3	7.4
WNW	2.0		4.0	.7								6.7	6.8
NW		4.0	4.7	1.3								10.0	7.5
NNW	.7	.7	.7	.7								2.7	7.5
VARBL													
CALM												2.0	
	20.7	31.3	35.3	10.7								100.0	6.3

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUN
MONTH

ALL WEATHER
CLASS

13
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N													
NNE													
NE													
ENE													
E													
ESE													
SE													
SSE													
S			.7									.7	9.0
SSW		1.3	2.0									3.3	6.2
SW	.7	2.0	3.3	1.3								7.3	7.7
WSW	.7	2.0	8.7	13.3	.7							25.3	10.9
W		2.7	15.3	20.7	1.3							40.0	11.2
WNW	.7	2.0	4.7	5.3	2.0							14.7	11.1
NW	.7	2.0	1.3	2.7								6.7	8.1
NNW		.7	.7	.7								2.0	8.3
VARBL												.0	
CALM													
	2.7	12.7	36.7	44.0	4.0							100.0	10.4

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUN
MONTH

ALL WEATHER
CLASS

16
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.7	.7									1.3	6.5
NNE													
NE													
ENE													
E													
ESE													
SE													
SSE													
S													
SSW				.7								.7	16.0
SW			2.0	2.0								4.0	10.7
WSW		1.3	6.0	11.3								18.7	10.9
W			14.0	30.0	6.7	1.3						52.0	13.1
WNW		1.3	5.3	12.0	.7	.7						20.0	11.6
NW		.7	2.0									2.7	7.5
NNW			.7									.7	8.0
VARBL													
CALM												.0	
		4.0	30.7	56.0	7.3	2.0						100.0	12.0

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUN
MONTH

ALL WEATHER
CLASS

19
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		1.3	.7									2.0	5.7
NNW		1.3										1.3	6.0
NE													
ENE													
E													
ESE													
SE													
SSE	.7											.7	3.0
S													
SSW		2.0										2.0	4.7
SW		.7	2.7	.7								4.0	8.7
WSW		2.0	3.3	8.7	2.7							16.7	11.6
W	1.3	6.7	17.3	28.7	2.0	.7						56.7	10.9
WNW		2.0	2.7	4.7	.7							10.0	11.0
NW	.7	.7	3.3									4.7	7.1
NNW		2.0										2.0	5.0
VARB													
CALM												.0	
	2.7	18.7	30.0	42.7	5.3	.7						100.0	10.3

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUN
MONTH

ALL WEATHER
CLASS

22
HOURS (L.S.T.)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N													
NNE	1.3	.7										2.0	3.0
NE													
ENE													
E													
ESE													
SE													
SSE													
S	2.0												
SSW	3.3	3.3	.7									2.0	2.3
SW	2.0	5.3	3.3	2.7								4.0	5.3
WSW	2.7	4.7	11.3	2.0								13.3	7.0
W	5.3	5.3	15.3	14.7	1.3							20.7	7.5
WNW	.7	2.7	2.7	2.0								42.0	9.1
NW	1.3	1.3										8.0	8.1
NNW		1.3										2.7	4.0
VARBL												1.3	4.5
CALM												4.0	
	15.3	24.7	33.3	21.3	1.3							100.0	7.4

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUN
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	.7	.2									1.9	3.8
NNE	.5	.2										.7	3.1
NIE	.1	.1										.2	4.0
ENE	.1											.1	3.0
E	.2											.2	3.0
ESE	.4	.2										.7	3.0
SE	.2											.2	2.5
SSE	.2	.7										.9	4.4
S	1.2	.9	.3									2.4	4.1
SSW	.9	1.7	1.0	.2								3.8	5.7
SW	1.2	2.7	3.4	1.3								8.6	7.2
WSW	1.8	4.8	7.7	6.2	.4							21.0	8.6
W	2.7	5.2	13.1	14.2	1.7	.2						37.2	10.0
WNW	1.0	1.7	3.4	3.2	.4	.1						9.8	9.4
NW	.9	1.9	1.5	.5								4.8	6.1
NNW	.4	.9	.3	.2								1.9	6.2
VARBL													
CALM												5.6	
	12.7	21.8	31.1	25.8	2.6	.3						100.0	8.0

TOTAL NUMBER OF OBSERVATIONS

1200

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

ALL WEATHER
CLASS

CONDITION

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

JUL
MONTH

01
HOURS (L.S.T.)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N												1.3	3.5
NNE	.6	.6											
NE													
ENE													
E													
ESE					.6							.6	20.0
SE		.6										.6	5.0
SSE		.6										.6	5.0
S	1.3	.6	1.3									3.2	5.0
SSW	1.3	1.9	1.9	.6								5.8	6.3
SW	1.3	3.2	8.4									12.9	7.0
WSW	1.9	4.5	12.3	3.9								22.6	8.0
W	1.9	9.0	16.1	5.8	.6							33.5	8.2
WNW	.6	3.2	3.9	.6								8.4	7.5
NW	.6	.6	.6									1.9	4.7
NNW	1.3	.6										1.9	2.3
VARBL													
CALM												6.3	
	11.0	25.8	44.5	11.0	1.3							100.0	7.0

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUL
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

CONDITION

8

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N													
NNE													
NE													
ENE													
E	.6											.6	2.0
ESE	.6	.6										1.3	3.5
SE		.6										.6	4.0
SSE													
S				.6								.6	13.0
SSW	.6	3.2	1.9									5.3	5.9
SW	1.9	3.2	8.4	1.3								14.8	7.0
WSW	3.2	7.1	8.4	3.9								22.6	7.1
W	5.2	5.2	12.3	5.8								28.4	7.7
WNW	2.6	2.6	.6	1.3								7.1	5.6
NW	.6	1.9										2.6	4.3
NNW	2.6											2.6	2.0
VARBL													
CALM												12.9	
	18.1	24.5	31.6	12.9								100.0	5.9

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUL
MONTH

ALL WEATHER
CLASS

07
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N													
NNE													
NE													
ENE													
E		.6										.6	6.0
ESE		.6											
SE	.6	.6											
SSE	1.3	.6										1.3	4.0
S	1.9	1.9	1.3									1.9	3.7
SSW	1.9	3.2	.6									5.2	5.4
SW	2.6	7.1	2.6									5.8	4.9
WSW	4.5	5.6	11.0	1.9								12.3	4.8
W	1.9	7.7	8.4	3.9								23.2	6.9
WNW	1.3	5.2	2.6									21.9	7.4
NW												9.0	5.5
NNW	1.9	1.3										3.2	2.8
VARBL													
CALM												15.5	
	18.1	34.2	26.5	5.8								100.0	5.1

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUL
MONTH

ALL WEATHER
CLASS

10
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		1.3										1.3	5.5
NNE													
N E													
ENE													
E													
ESE													
SE			.6									.6	8.0
SSE	.6		.6									1.3	5.0
S	5.2	1.3	1.3	.6								7.1	3.9
SSW	1.9	1.3	1.3									4.5	4.9
SW	1.3	9.0	5.2									15.5	6.0
WSW	5.8	5.8	11.0	4.5								27.1	7.2
W	3.2	12.9	5.8	5.8								27.7	7.1
WNW	.6	.6	3.9	1.3	.6							7.1	9.5
NW	.6		2.6									3.2	6.6
NNW		1.3	.6									1.9	5.7
VARBL													
CALM												2.6	
	19.4	33.5	31.6	12.3	.6							100.0	6.5

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUL
MONTH

ALL WEATHER
CLASS

13
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N			.6									.6	10.0
NNE													
NE													
ENE													
E													
ESE		.6										.6	4.0
SE													
SSE												.6	14.0
S				.6									
SSW													
SW		1.9	6.5	1.9								10.3	9.1
WSW	.6	1.3	6.5	6.5								14.8	10.4
W		3.9	18.7	21.9	3.2							47.7	11.1
WNW		5.2	3.2	7.7	.6							16.8	9.8
NW		1.3	3.9	2.6								7.7	9.1
NNW			.6									.6	8.0
VARBL													
CALM												.0	
	.6	14.2	40.0	41.3	3.9							100.0	10.4

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUL
MONTH

ALL WEATHER
CLASS

16
HOURS (L.S.T.)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N				.6								.6	11.0
NNE													
NE													
NNE													
E													
ESE													
SE													
SSE													
S				.6								.6	12.0
SSW													
SW			1.9	.6								2.6	10.0
WSW		3.2	2.6	4.5								10.3	10.0
W	.6	2.6	10.3	38.1	9.7	.6						61.9	13.2
WNW	.6	1.3	5.8	13.5	.6							21.9	11.2
NW			1.9									1.9	8.7
NNW													
VARB													
CALM												.0	
	1.3	7.1	22.6	58.1	10.3	.6						100.0	12.3

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUL
MONTH

ALL WEATHER
CLASS

19
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.6	.6									1.3	5.5
NNE			.6									.6	8.0
NE													
ENE													
E													
ESE													
SE													
SSE													
S				.6								.6	12.0
SSW		.6	.6									1.3	6.5
SW		2.6	3.9									6.3	7.3
WSW	.6	5.2	3.9	5.2								14.8	8.7
W		4.5	15.5	29.7	7.1							56.8	12.1
WNW		.6	5.2	7.1	2.6							15.5	12.4
NW			1.9									1.9	8.0
NNW		.6										.6	5.0
VARBL												.0	
CALM													
	.6	14.8	32.3	42.6	9.7							100.0	11.0

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUL
MONTH

ALL WEATHER
CLASS

22
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N			.6									.6	8.0
NNE													
NE		.6										.6	5.0
ENE													
E													
ESE													
SE													
SSE													
S	1.3	.6	1.3	.6								3.9	6.7
SSW	.6	.6	2.6									3.9	7.7
SW	.6	1.9	7.1	1.3								11.0	7.9
WSW	1.9	7.7	5.2	2.6								17.4	7.1
W	1.3	8.4	18.7	17.4	1.3							47.1	9.8
WNW		.6	3.9	1.3								5.8	9.9
NW	.6	1.3	1.3									3.2	5.6
NNW		.6	.6									1.3	5.5
VARBL													
CALA												5.2	
	6.5	22.6	41.3	23.2	1.3							100.0	8.2

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

JUL
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.2	.2	.1								.6	7.3
NNE	.1	.1	.1									.2	5.0
NE		.1										.1	5.0
ENE													
E	.1	.1										.2	4.0
ESE	.1	.2			.1							.3	7.8
SE	.1	.2	.1									.4	5.0
SSE	.2	.2	.1									.5	4.3
S	1.2	.6	.5	.5								2.7	5.9
SSW	.8	1.4	1.1	.1								3.4	5.9
SW	1.0	3.6	5.5	.6								10.7	7.0
WSW	2.3	5.1	7.6	4.1								19.1	7.9
W	1.8	6.8	13.2	16.0	2.7	.1						40.6	10.3
WNW	.7	2.4	3.6	4.1	.6							11.5	9.6
NW	.3	.6	1.5	.3								2.8	7.2
NNW	.7	.6	.2									1.5	3.7
VARBL													
CALM												5.3	
	9.4	22.1	33.8	25.9	3.4	.1						100.0	8.3

TOTAL NUMBER OF OBSERVATIONS

1240

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

23239 STATION ALAMEDA, CALIFORNIA STATION NAME YEARS 73-77 MONTH AUG 01 HOURS (L.S.T.)

ALL WEATHER
CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N												.6	2.0
NNE	.6												
NE													
ENE													
E		.6										.6	5.0
ESE	.6	.6										1.3	3.0
SE													
SSE		.6										.6	4.0
S		1.3										1.3	5.0
SSW	.6	.6	1.3									2.6	6.0
SW	1.9	2.6	4.5									9.0	5.9
WSW	.6	4.5	8.4	4.5								18.1	8.3
W	2.6	6.5	23.2	6.5	.6							39.4	8.5
WNW	3.9	3.9	3.2	1.9								12.9	6.4
NW	1.3	1.9	.6									3.9	4.5
NNW		.6										.6	4.0
VARBL													
CALM												9.0	
	12.3	23.9	41.3	12.9	.6							100.0	6.7

TOTAL NUMBER OF OBSERVATIONS 155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

AUG
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.6										.6	4.0
NNE													
NE													
ENE													
E	1.9											1.9	2.3
ESE	1.9		.6									2.6	3.5
SE	.6											.6	3.0
SSE		.6										.6	4.0
S													
SSW	.6		1.3									1.9	6.0
SW		3.9	4.5	1.9								10.3	7.9
WSW	1.9	5.8	9.7	3.2								20.6	7.6
W	1.9	5.8	19.4	5.2								32.3	8.4
WNW	4.5	4.5	2.6	.6								12.3	5.2
NW	.6	1.9										2.6	3.5
NNW	.6	1.3										1.9	3.3
VARBL													
CALM												11.6	
	14.8	24.5	38.1	11.0								100.0	6.2

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

AUG
MONTH

ALL WEATHER
CLASS

07
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9											1.9	2.3
NNE													
NE													
ENE													
E													
ESE	.6	1.9										2.6	4.0
SE		.6										.6	4.0
SSE		.6	.6									1.3	7.0
S		1.3										1.3	4.0
SSW		2.6	1.9									4.5	6.3
SW	.6	2.6	4.5	.6								8.4	7.2
WSW	1.9	5.8	7.1	1.9								16.8	7.2
W	4.5	13.5	11.6	3.9								33.5	6.5
WNW	2.6	3.9	3.9									10.3	5.1
NW	1.9	1.9		.6								4.5	4.4
NNW	.6	.6										1.3	3.5
VARBL													
CALA												12.9	
	14.8	35.5	29.7	7.1								100.0	5.4

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

AUG
MONTH

ALL WEATHER
CLASS

10
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N													
NNE													
N													
ENE													
E													
ESE													
SE	.6											.6	2.0
SSE													
S	1.3	5.2										6.5	4.5
SSW	2.6	2.6	1.3									6.5	4.5
SW	1.9	5.8	4.5									12.3	5.7
WSW	3.9	9.0	9.0	3.9								25.8	6.9
W	2.6	12.3	14.8	3.2								32.9	7.1
WNW	.6	2.6	2.6									5.8	6.3
NW	1.3	1.9	1.3									4.5	5.1
NNW			.6									.6	8.0
VARBL													
CALM												4.5	
	14.8	39.4	34.2	7.1								100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

AUG
MONTH

ALL WEATHER
CLASS

13
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N													
NNE													
NE													
ENE													
E													
ESE													
SE	.6											.6	3.0
SSE													
S		1.3										1.3	5.5
SSW													
SW	.6	1.3	1.9									3.9	6.8
WSW		3.2	3.2	7.1								12.9	10.3
W	1.3	5.2	21.9	23.2	1.9							53.5	10.3
WNW	.6	2.6	11.0	8.4								22.6	9.5
NW		2.6	1.3	.6								4.5	7.1
NNW			.6									.6	8.0
VARB													
CALM												.0	
	3.2	15.5	40.0	39.4	1.9							100.0	9.7

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

AUG
MONTH

ALL WEATHER
CLASS

16
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N													
NNE													
NE													
ENE													
E													
ESE													
SE													
SSE													
S													
SSW				1.3								1.3	13.0
SW			2.6									2.6	9.0
WSW			3.9	3.2	.6							7.7	11.2
W		1.9	17.4	39.4	5.8							64.5	12.2
WNW		.6	7.1	13.5	.6							21.9	11.5
NW			.6									.6	10.0
NNW		.6		.6								1.3	10.5
VARBL													
CALM												.0	
		3.2	31.6	58.1	7.1							100.0	11.9

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

AUG
MONTH

ALL WEATHER
CLASS

19
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		1.3										1.3	5.0
NNE													
NE													
NNE													
E													
ESE													
SE													
SSE													
S			.6	.6								.6	8.0
SSW			.6	.6								.6	12.0
SW		1.3	.6	.6								1.9	7.0
WSW		.6	4.5	5.8								11.0	10.4
W	.6	5.2	23.9	31.0	4.5	.6						65.8	11.4
WNW	.6	1.9	6.5	6.5								15.5	9.4
NW		1.3										1.3	5.5
NNW		.6	.6									1.3	6.5
VARBL													
CALA												.6	
	1.3	12.3	36.8	43.9	4.5	.6						100.0	10.6

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

AUG
MONTH

ALL WEATHER
CLASS

22
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6											.6	3.0
NNE													
NE													
ENE													
E													
ESE	.6											.6	3.0
SE	.6	.6										1.3	3.5
SSE		.6										.6	4.0
S				.6								.6	12.0
SSW	1.9	1.9										1.9	4.0
SW	1.9	3.2	2.6	.6								8.4	5.6
WSW	2.6	7.1	7.7	5.8								23.2	7.7
W	2.6	9.7	22.6	7.1	.6							42.6	8.4
WNW	1.9	3.2	4.5	1.9								11.6	7.2
NW		1.3										1.3	4.0
NNW			.6									.6	9.0
VARB													
CALM												6.5	
	11.0	27.7	38.1	16.1	.6							100.0	7.0

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

5702 SURFACE WINDS JAN 78

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

AUG
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNOTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	.3	.2										.6	3.4
NNE	.1											.1	2.0
NE													
ENE													
E	.2	.1										.3	3.0
ESE	.5	.2	.1									.9	3.5
SE	.3	.2										.5	3.2
SSE		.3	.1									.4	5.2
S	.2	1.1	.1	.1								1.5	5.2
SSW	.5	1.0	.7	.2								2.4	6.0
SW	.9	2.6	3.2	.4								7.1	6.6
WSW	1.4	4.4	6.7	4.4	.1							17.0	8.2
W	2.0	7.5	19.4	14.9	1.7	.1						45.6	9.6
WNW	1.9	2.9	5.2	4.1	.1							14.1	8.2
NW	.6	1.6	.5	.2								2.9	5.2
NNW	.2	.5	.3	.1								1.0	6.2
VARBL													
CALM												5.6	
	9.0	22.7	36.2	24.4	1.9	.1						100.0	7.9

TOTAL NUMBER OF OBSERVATIONS

1240

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

SEP
MONTH

ALL WEATHER
CLASS

01
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7											.7	2.0
NNE		.7										.7	4.0
NE	.7											.7	3.0
ENE													
E	1.3											1.3	2.5
ESE		.7										.7	5.0
SE	.7	.7										1.3	4.0
SSE	.7			.7								1.3	6.0
S	2.0	.7	1.3	.7								4.7	6.0
SSW		1.3	.7									2.0	6.3
SW	1.3	2.7	3.3									7.3	6.1
WSW	2.7	5.3	9.3	2.7								20.0	7.3
W	2.7	8.7	14.7	4.7								30.7	7.7
WNW	2.0	4.7	1.3									8.0	5.2
NW	2.0	6.0										8.0	4.3
NNW	.7	.7										1.3	3.0
VARBL													
CALM												11.3	
	17.3	32.0	31.3	8.0								100.0	5.7

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

SEP
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.0	2.0	.7									4.7	3.7
NNE	.7											.7	3.0
NE													
NNE													
E													
ESE	2.0											2.0	3.0
SE		1.3	.7	.7								2.0	6.3
SSE												.7	15.0
S		1.3	.7									2.0	6.0
SSW	.7	2.7	1.3									4.7	5.6
SW		5.3	.7									6.0	5.0
WSW	3.3	6.0	8.7	.7								18.7	6.1
W	3.3	9.3	12.7	5.3								30.7	7.5
WNW	4.0	3.3	2.7									10.0	4.9
NW	1.3	1.3	1.3									4.0	4.8
NNW	2.7											2.7	2.0
VARB													
CALM												11.3	
	20.0	32.7	29.3	6.7								100.0	5.3

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

SEP
MONTH

ALL WEATHER
CLASS

07
HOURS (L.S.T.)

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.0	2.0	2.0									6.0	4.7
NNE	.7											.7	2.0
NE													
ENE													
E	2.0	.7										2.7	2.8
ESE	2.0	1.3	1.3									4.7	4.6
SE	1.3	.7	.7									2.7	4.5
SSE			1.3	.7								2.0	9.7
S	1.3	1.3										2.7	3.8
SSW	2.7	2.7	.7									6.0	4.4
SW	1.3	2.0	2.7									6.0	5.8
WSW	.7	4.7	4.7	.7								10.7	5.9
W	3.3	11.3	10.7	2.7								28.0	6.5
WNW	3.3	2.7	1.3									7.3	4.4
NW	1.3	1.3										2.7	3.8
NNW	1.3	2.7										4.0	3.8
VARB													
CALM												14.0	
	23.3	33.3	25.3	4.0								100.0	4.6

TOTAL NUMBER OF OBSERVATIONS

150

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

23239 STATION ALAMEDA, CALIFORNIA 73-77 YEARS SEP NORTH 10 HOURS (L.S.T.)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		2.0										2.0	5.3
NNE		.7										.7	5.0
NE													
ENE													
E													
ESE													
SE		.7		.7								1.3	9.0
SSE	.7	2.0	.7									3.3	5.6
S	4.0	6.0	2.7	.7								13.3	5.1
SSW	5.3	2.7	.7									8.7	3.5
SW	4.0	1.3										5.3	3.5
WSW	4.7	6.0	5.3	.7								18.7	5.6
W	4.7	6.7	9.3	4.0								24.7	6.9
WNW	2.7	2.7	2.0									7.3	5.0
NW	.7	.7		.7								2.0	5.7
NNW	2.7	3.3	1.3									7.3	4.6
VARBL													
CALM												5.3	
	29.3	36.7	22.0	6.7								100.0	5.2

TOTAL NUMBER OF OBSERVATIONS 150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

STATION 23239 ALAMEDA, CALIFORNIA STATION NAME 73-77 YEARS SEP MONTH 13 HOURS (L.S.T.) 13

ALL WEATHER CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.7	.7									1.3	6.5
NNE		.7										.7	6.0
NE													
ENE			.7									.7	10.0
E													
ESE													
SE													
SSE													
S		2.0	1.3	.7								4.0	6.8
SSW	.7	2.7										3.3	4.2
SW		2.0	1.3									3.3	6.6
WSW	1.3	3.3	4.7	2.7								12.0	7.7
W		4.0	25.3	17.3	.7							47.3	10.3
WNW		2.7	8.7	4.7								16.0	9.2
NW		.7	4.7	.7								6.0	8.1
NNW		1.3	4.0									5.3	6.9
VARB												.0	
CALM													
	2.0	20.0	51.3	26.0	.7							100.0	8.9

TOTAL NUMBER OF OBSERVATIONS 150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

SEP
MONTH

ALL WEATHER
CLASS

16
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N													
NNE													
NE													
ENE													
E													
ESE													
SE													
SSE			.7									.7	9.0
S	.7		.7									1.3	5.5
SSW			2.0	.7								2.7	10.5
SW				1.3								1.3	12.5
WSW			2.7	3.3	.7							6.7	11.7
W		2.0	19.3	44.0	4.7	.7						70.7	12.1
WNW		.7	6.7	4.7								12.0	10.0
NW			2.7	.7								3.3	9.0
NNW			1.3									1.3	8.0
VARBL												.0	
CALM													
	.7	2.7	36.0	54.7	5.3	.7						100.0	11.5

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

SEP
MONTH

ALL WEATHER
CLASS

19
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	2.0		.7								3.3	6.2
NNE													
NE													
ENE													
E													
ESE													
SE		.7										.7	4.0
SSE			.7									.7	7.0
S				.7								.7	13.0
SSW			.7									.7	10.0
SW		1.3		1.3								2.7	8.3
WSW	.7	2.0	3.3	1.3								7.3	7.6
W	1.3	6.0	30.7	28.0	.7							66.7	10.3
WNW	.7	4.0	5.3	1.3								11.3	7.3
NW	2.0		1.3									3.3	4.8
NNW		.7										.7	5.0
VARBL													
CALM												2.0	
	5.3	16.7	42.0	33.3	.7							100.0	9.1

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

SEP
MONTH

ALL WEATHER
CLASS

22
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.7										.7	5.0
NNE	.7											.7	3.0
NE	.7	.7										.7	4.0
ENE													
E		.7										.7	4.0
ESE													
SE													
SSE	.7												
S	.7	.7	2.0									.7	1.0
SSW	.7	.7										3.3	6.4
SW	2.0	3.3	1.3	2.0								1.3	4.5
WSW	3.3	6.0	6.7	1.3								8.7	6.2
W	5.3	8.0	20.7	10.7	.7							17.3	6.3
WNW	2.7	2.0	1.3									45.3	8.4
NW	2.7	2.0	.7									6.0	4.9
NNW	.7	.7										5.3	4.0
VARBL												1.3	3.5
CALM												8.0	
	19.3	25.3	32.7	14.0	.7							100.0	6.4

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

SEP
MONTH

ALL WEATHER
CLASS

ALL
MOUSE (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.2	.4	.1								2.3	4.8
NNE	.2	.2										.5	3.8
NE	.1	.1										.2	3.5
ENE			.1									.1	10.0
E	.4	.2										.6	2.9
ESE	.5	.2	.2									.9	4.2
SE	.2	.5	.2	.1								1.0	5.6
SSE	.2	.2	.5	.2								1.2	7.2
S	1.1	1.3	1.1	.3								4.0	5.7
SSW	1.2	1.6	.7	.1								3.7	5.1
SW	1.1	2.2	1.2	.6								5.1	6.0
WSW	2.1	4.4	5.7	1.7	.1							13.9	6.9
W	2.6	7.0	17.9	14.6	.8	.1						43.0	9.4
WNW	1.9	2.8	3.7	1.3								9.7	6.9
NW	1.2	1.5	1.3	.2								4.3	5.5
NNW	1.0	1.2	.8									3.0	4.8
VARB													
CALM												6.5	
	14.7	24.9	33.7	19.2	.9	.1						100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

1200

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

OCT
MONTH

ALL WEATHER
CLASS

01
HOURS (L.S.T.)

CONDITION

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.6	.6	.6									3.9	4.0
NNE	.6		.6									1.3	5.0
NE	.6											.6	3.0
ENE	.6	1.3										1.9	3.7
E	3.9	1.3										5.2	3.1
ESE		2.6	.6									3.2	5.6
SE		.6		1.3								1.9	11.0
SSE	.6	1.3	1.3	.6								3.9	7.3
S	1.9	1.3										3.2	2.8
SSW		1.9										1.9	5.0
SW	.6	1.9	1.9	1.3								5.8	7.7
WSW	.6	3.9	.6	2.6								7.7	7.5
W	4.5	7.1	4.5	1.9								18.1	5.8
WNW	1.3	6.5	.6	.6								9.0	4.8
NW	1.9	1.3	.6	.6								4.5	5.9
NNW	3.9	2.6	.6	.6								7.7	4.6
VARBL													
CALM												20.0	
	23.9	34.2	12.3	9.7								100.0	4.5

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

OCT
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.9	1.9	1.9									7.7	4.4
NNE	2.6	1.3	1.3									5.2	4.6
NE	.6											.6	1.0
NNE	.6											.6	1.0
E	3.2	1.3										4.5	3.0
ESE	1.3	.6	1.3									3.2	5.4
SE	2.6	.6	.6	1.9								5.8	6.6
SSE	.6	.6	1.3									2.6	6.8
S		1.3										1.3	4.5
SSW		.6	.6									1.3	7.0
SW	1.3	3.2	1.3									5.8	5.3
WSW	1.3	2.6	1.3									5.2	5.5
W	4.5	5.8	9.0									19.4	6.1
WNW	3.9	1.9	1.9	.6								8.4	4.8
NW	.6	.6	.6									1.9	5.0
NNW	3.2	1.3	3.2									7.7	4.8
VARBL													
CALA												18.7	
	30.3	23.9	24.5	2.6								100.0	4.3

TOTAL NUMBER OF OBSERVATIONS

155

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

OCT
MONTH

ALL WEATHER
CLASS

07
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.8	.6		.6								7.1	3.5
NNE	1.3	3.2	.6									5.2	4.5
NE	.6	1.3	1.3									3.2	5.8
ENE													
E	5.2	.6										5.8	2.8
ESE	1.9	2.6	1.3									5.8	4.7
SE	.6	.6	1.9	.6								3.9	7.2
SSE				1.3								1.3	15.5
S	1.3	4.5	1.3									7.1	5.1
SSW		.6										.6	6.0
SW		3.9	1.3	.6								5.8	6.2
WSW		2.6	.6	1.9								5.2	8.1
W	.6	5.2	3.9	1.9								11.6	7.6
WNW	2.6	1.9	1.3									5.8	4.7
NW	1.9	1.3										3.2	3.6
NNW	3.2	4.5		.6								8.4	4.5
VARB.													
CALM												20.0	
	25.2	33.5	13.5	7.7								100.0	4.4

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

UCT
MONTH

ALL WEATHER
CLASS

10
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	1.9	3.2									6.5	5.7
NNE		.6	.6									1.3	6.0
NE					.6							.6	17.0
ENE													
E			.6									.6	7.0
ESE	.6											.6	3.0
SE	.6	3.9	.6	.6	.6							6.5	7.5
SSE	1.9	3.2	.6									5.8	4.3
S	7.1	3.9	1.3									12.3	3.8
SSW	.6	2.6										3.2	3.6
SW	2.6	4.5	1.3									8.4	4.4
WSW	2.6	6.5	1.9									11.0	4.8
W	1.9	7.7	2.6	1.3								13.5	5.3
WNW	.6	3.2	1.3		.6							5.8	7.4
NW	1.3	2.6	.6	1.3								5.8	6.1
NNW	1.9	6.5	.6	1.9	.6							11.6	6.8
VARBL													
CALM												6.5	
	23.2	47.1	15.5	5.2	2.6							100.0	5.1

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

OCT
MONTH

ALL WEATHER
CLASS

13
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		2.6	1.9									4.5	6.4
NNE													
NE													
ENE				.6								.6	12.0
E													
ESE													
SE		.6		.6								1.3	8.5
SSE					.6							.6	18.0
S	3.2	2.6	1.9									8.4	5.8
SSW	1.3	1.9		1.3								4.3	6.0
SW	.6	2.6	1.3	.6								5.2	6.5
WSW	1.9	3.9	2.6	.6								9.0	6.0
W	1.9	5.8	13.5	3.9		.6						25.8	8.2
WNW	1.3	5.2	9.7	1.3								17.4	7.3
NW		2.6	6.5									9.0	7.1
NNW		5.2	5.2	.6								11.0	6.9
VARBL													
CALA												2.6	
	10.3	32.9	42.6	9.7	1.3	.6						100.0	7.0

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

OCT
MONTH

ALL WEATHER
CLASS

16
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.6	.6									1.3	7.0
NNE													
NE													
ENE													
E													
ESE		.6										.6	6.0
SE				.6								.6	14.0
SSE			.6									.6	8.0
S	.6			.6	.6							1.3	18.0
SSW		.6	1.3	.6								3.2	7.6
SW	.6	2.6	1.3									3.9	5.5
WSW		1.3	4.5	1.3	.6							8.4	9.2
W	.6	3.9	23.2	23.2	.6							51.0	10.2
WNW		3.2	10.3	5.2								19.4	9.8
NW		1.9	2.6	1.3								5.8	7.6
NNW		1.3	.6	.6								2.6	8.8
VARBL													
CALM												1.3	
	1.9	16.1	45.2	33.5	1.9							100.0	9.5

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

OCT
MONTH

ALL WEATHER
CLASS

19
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	3.2	1.3									5.8	5.1
NNE	.6	1.3	1.3									3.2	6.2
NE		.6										.6	6.0
ENE													
E													
ESE													
SE					.6							.6	20.0
SSE	.6			.6	.6							1.3	10.0
S			.6	1.3	.6							2.6	13.0
SSW			1.9									1.9	8.7
SW	.6		.6									1.3	5.0
WSW	1.9	2.6	5.8	1.9	1.3							13.3	8.4
W	5.8	9.7	17.4	6.5								39.4	7.5
WNW	1.9	2.6	3.2	2.6	.6							11.0	8.4
NW	1.9	4.2	1.9									8.4	5.0
NNW	.6	.6	1.9	.6								3.9	7.3
VARBL													
CALM												6.5	
	15.5	25.2	36.1	12.9	3.9							100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

OCT
MONTH

ALL WEATHER
CLASS

22
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.5	1.9	.6									7.1	3.5
NNE	.6	1.9										2.6	3.5
NE	.6											.6	1.0
ENE	1.3	.6										1.9	2.7
E	.6											.6	2.0
ESE	1.3			.6								1.9	6.0
SE			1.3	.6								1.9	10.7
SSE	.6	.6										1.3	4.0
S		1.9	1.3	1.9								5.2	9.4
SSW	.6	.6	.6									1.9	5.7
SW	1.3	1.9	1.3									4.5	5.7
WSW	3.9	3.9	3.2	1.9								9.0	7.6
W	7.7	9.0	9.0	2.6								23.2	6.6
WNW	3.2	1.9	1.3	.6								7.1	5.0
NW	2.6	2.6	.6	1.9								7.7	6.3
NNW	1.3	.6		.6								2.6	5.3
VARBL													
CALM												20.6	
	22.6	26.5	19.4	11.0								100.0	4.8

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

OCT
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.4	1.7	1.3	.1								3.5	4.7
NNE	.7	1.0	.6									2.3	4.8
NE	.3	.2	.2	.1								.8	5.7
ENE	.2	.2		.1								.6	4.0
E	1.6	.4	.1									2.1	3.1
ESE	.6	.8	.4	.1								1.9	5.2
SE	.5	.8	.6	.8	.2							2.8	8.4
SSE	.6	.7	.5	.2	.2							2.2	7.2
S	1.7	1.9	.8	.5	.2							5.2	6.1
SSW	.4	1.1	.6	.2								2.3	6.1
SW	.9	2.6	1.3	.3								5.1	5.8
WSW	1.1	3.4	2.6	1.3	.2							8.6	7.1
W	3.0	6.6	10.4	5.2	.1							25.2	7.7
WNW	1.9	3.3	3.7	1.4	.2							10.5	7.1
NW	1.3	2.2	1.7	.6								5.8	6.1
NNW	1.8	2.8	1.5	.7	.1							6.9	5.9
VARBL													
CALM												12.0	
	19.1	29.9	26.1	11.5	1.2	.1						100.0	5.8

TOTAL NUMBER OF OBSERVATIONS

1240

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

STATION
23239

STATION NAME
ALAMEDA, CALIFORNIA

73-77

YEARS

MONTH
NOV

CLASS
ALL WEATHER

HOURS (L.S.T.)
01

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.3	6.7	2.7									12.7	4.8
NNE	.7	1.3		.7								2.7	6.0
NE	.7		.7									1.3	5.0
ENE	1.3											1.3	1.0
E	2.0	2.7										4.7	3.4
ESE	2.7	2.0	1.3	.7								6.7	5.4
SE	1.3	2.0		.7								4.0	5.3
SSE	.7	.7	1.3									2.0	7.7
S	1.3	2.0	2.0	1.3								6.7	7.2
SSW	.7			1.3								2.0	11.0
SW	.7	2.7										2.7	5.0
WSW	.7		.7									1.3	4.0
W	2.0		3.3	.7	.7							6.7	7.6
WNW	.7	1.3	2.0									4.0	6.3
NW	.7	1.3	1.3	.7								4.0	6.8
NNW	4.7	2.7	1.3	3.3								12.0	6.6
VARBL													
CALM												25.3	
	22.7	25.3	16.7	9.3	.7							100.0	4.4

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

NOV
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	7.3	3.3	2.7									13.3	4.3
NNE	1.3	1.3	.7									3.3	4.2
NE	2.7	.7										3.3	3.0
ENE	.7	.7										1.3	4.5
E	6.0	.7	.7									7.3	3.1
ESE	.7	1.3	2.7									4.7	6.9
SE		4.0	1.3		1.3							6.7	8.4
SSE			1.3	.7	.7							2.7	12.5
S	.7	.7	2.0									3.3	6.4
SSW	.7	.7										1.3	3.0
SW	.7	.7	.7		.7							2.7	8.5
WSW	.7	.7	.7	.7								2.0	6.7
W	.7	2.0	.7	1.3								4.7	6.9
WNW	.7			1.3								2.0	10.7
NW		2.0	1.3	.7								4.0	8.5
NNW	1.3	2.7	1.3	2.7								8.0	7.4
VARBL													
CALM												29.3	
	24.0	21.3	15.3	7.3	2.7							100.0	4.4

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

NOV
MONTH

ALL WEATHER
CLASS

07
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.3	2.0	1.3	.7								7.3	4.6
NNE	2.7	1.3	.7									4.7	3.6
NE	2.7	.7										3.3	2.6
ENE	1.3	.7										2.0	3.0
E	4.7	2.7										7.3	3.0
ESE	2.7	4.7	1.3									8.7	4.7
SE	1.3	4.7	2.0	3.3	.7							12.0	8.7
SSE	.7	.7	.7	.7	.7							2.0	10.7
S	1.3	.7	1.3	.7								4.0	6.5
SSW													
SW		1.3										1.3	5.0
WSW	.7	1.3										2.0	4.3
W		1.3	2.0	.7								4.0	8.3
WNW		.7	.7	.7								1.3	6.0
NW	2.0	.7	.7	.7								3.3	4.2
NNW	3.3	1.3	2.7	2.0	.7							10.0	7.1
VARBL													
CALM												26.7	
	26.0	24.7	13.3	7.3	2.0							100.0	4.2

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

NOV
MONTH

ALL WEATHER
CLASS

10
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.0	4.0	3.3	2.0	.7							12.0	7.4
NNE			.7									.7	10.0
NE		2.7										2.7	4.8
ENE		.7										.7	4.0
E			.7									.7	10.0
ESE		2.7		.7								3.3	6.6
SE		2.7	4.0	.7	1.3							8.7	9.3
SSE	2.0	6.7	2.0	.7	.7							12.0	6.6
S	6.7	2.7	1.3	1.3		.7						12.7	5.9
SSW	1.3	1.3	1.3									4.0	5.0
SW	2.0	.7	1.3									4.0	4.3
WSW	2.0	.7	1.3									4.0	4.7
W	2.7	2.7		1.3								6.7	5.3
WNW	3.3		.7	.7								4.7	4.7
NW	2.0	2.0	2.7									6.7	5.6
NNW	2.7	2.7	5.3		.7							11.3	6.6
VARBL													
CALM												5.3	
	26.7	32.0	24.7	7.3	3.3	.7						100.0	6.0

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

NOV
MONTH

ALL WEATHER
CLASS

13
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		2.0	2.7	.7	.7							6.0	8.9
NNE		.7			.7							1.3	12.5
NE													
ENE													
E													
ESE	.7		.7									1.3	4.3
SE		.7	.7	.7	.7							2.7	11.0
SSE	.7	.7	1.3			.7						3.3	10.2
S	4.0	5.3	1.3	.7	.7							12.0	5.7
SSW	3.3	4.7	.7	.7								9.3	5.0
SW	.7	.7										1.3	4.0
WSW	4.0	3.3	.7	2.0								10.0	5.6
W	3.3	4.7	3.3	2.7								14.0	6.7
WNW	2.0	4.7	5.3	.7								12.7	6.3
NW	.7	6.7	4.7	1.3								13.3	6.7
NNW		3.3	1.3	2.0	.7	.7						8.0	9.9
VARBL													
CALM												4.7	
	19.3	37.3	22.7	11.3	3.3	1.3						100.0	6.6

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

NOV
MONTH

ALL WEATHER
CLASS

16
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		2.7	2.0	.7								5.3	7.1
NNE		1.3	.7									2.0	6.3
NE		1.3	.7									2.0	6.3
ENE													
E													
ESE													
SE	.7			.7	.7							2.0	12.0
SSE			2.7	.7	.7							2.7	9.3
S	3.3		.7	.7	.7							5.3	6.3
SSW	.7		.7			.7						2.0	10.3
SW	.7	3.3	.7									4.7	5.1
WSW	2.0	2.0	1.3	.7								6.0	6.2
W	2.0	6.0	8.7	4.7	.7							22.0	8.6
WNW		10.0	7.3	3.3	.7							21.3	7.7
NW		6.0	4.7	2.0								12.7	7.5
NNW	.7	2.7	3.3	.7	.7							8.0	8.2
VARBL													
CALM												4.0	
	10.0	35.3	33.3	13.3	3.3	.7						100.0	7.4

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

STATION
23239

STATION NAME
ALAMEDA, CALIFORNIA

YEARS
73-77

MONTH
NOV

CLASS
ALL WEATHER

HOURS (L.S.T.)
19

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.7	2.0	.7									5.3	4.0
NNE	1.3	.7										2.0	2.7
NE	.7											.7	2.0
ENE		.7										.7	4.0
E	1.3	.7										2.0	3.0
ESE	.7											.7	2.0
SE		.7		1.3	.7							2.7	11.8
SSE	.7	1.3	1.3		.7							4.0	7.7
S	.7	.7	1.3	.7	.7							4.0	8.7
SSW	1.3											1.3	3.0
SW		1.3	.7	.7								2.7	8.5
WSW	3.3	2.7	2.0	.7								5.3	7.0
W		4.0	7.3	1.3								16.0	6.7
WNW	.7	1.3	4.7	.7	.7							8.0	8.7
NW	3.3	2.0	2.7	3.3	.7							12.0	8.1
NNW	3.3	6.7	2.0	1.3								13.3	5.5
VARBL													
CALM												19.3	
	20.0	24.7	22.7	10.0	3.3							100.0	5.4

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

NOV
MONTH

ALL WEATHER
CLASS

22
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.7	3.3	2.0			.7						10.7	5.3
NNE	4.0	1.3										5.3	2.8
NE	1.3											1.3	2.0
ENE	.7											.7	2.0
E	3.3											3.3	2.0
ESE	.7	.7	.7	.7								2.7	6.8
SE	.7	2.7	.7		.7							4.7	7.0
SSE	1.3			1.3								2.7	8.8
S		3.3	2.0	.7	.7							6.7	7.9
SSW	.7	.7	1.3	.7								3.3	7.2
SW	1.3	1.3										2.7	3.8
WSW	4.0	.7	.7	.7								6.0	4.4
W	.7	4.7	4.0	1.3								10.7	7.3
WNW	.7	1.3	.7	.7								3.3	6.6
NW	2.0	2.0	2.7	2.0								8.7	7.1
NNW	4.7	2.7	3.3	.7	.7							12.0	6.0
VARBL													
CALM												15.3	
	30.7	24.7	18.0	8.7	2.0	.7						100.0	5.0

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

NOV
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.9	3.2	2.2	.5	.2	.1						9.1	5.7
NNE	1.2	1.0	.3	.1	.1							2.7	4.7
NE	1.0	.7	.2									1.8	3.7
ENE	.5	.3										.8	3.0
E	2.2	.8	.2									3.2	3.2
ESE	1.0	1.4	.8	.2								3.5	5.6
SE	.5	2.2	1.1	.9	.7							5.4	8.8
SSE	.6	1.2	1.3	.3	.3	.1						3.9	8.4
S	2.2	1.9	1.5	.7	.3	.1						6.8	6.6
SSW	1.1	.9	.5	.3	.1							2.9	6.1
SW	.7	1.3	.4	.1	.1							2.7	5.5
WSW	1.7	1.4	.8	.6								4.6	5.3
W	1.8	3.2	3.7	1.7	.2							10.6	7.3
WNW	1.0	2.4	2.7	.9	.2							7.2	7.2
NW	1.3	2.8	2.6	1.2	.1							8.1	7.0
NNW	2.6	3.1	2.6	1.6	.4	.1						10.3	7.0
YARBL													
CALM												16.2	
	22.4	28.2	20.8	9.3	2.6	.4						100.0	5.4

TOTAL NUMBER OF OBSERVATIONS

1200

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

DEC
MONTH

ALL WEATHER
CLASS

01
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.8	3.9	1.3	1.3		.6						12.9	6.0
NNE	1.3											1.3	3.0
NE	1.3		.6									1.9	3.7
ENE	.6	.6										1.3	3.0
E	3.9	3.2										7.1	3.2
ESE	1.9	3.2	.6	.6								6.5	5.5
SE	3.9	1.9	1.3	1.3								8.4	5.5
SSE			.6	.6								.6	14.0
S	1.9	1.9	.6	.6								5.2	5.5
SSW	.6	.6										1.3	4.0
SW		.6	1.3	.6		.6						3.2	12.2
WSW				.6								.6	13.0
W	.6	.6										1.3	4.0
WNW	.6		.6									1.3	4.0
NW	1.9	5.8										7.7	3.9
NNW	1.9	2.6	1.9	.6	.6							7.7	6.3
VARBL													
CALM												31.6	
	26.5	25.2	8.4	6.5	.6	1.3						100.0	3.8

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

DEC
MONTH

ALL WEATHER
CLASS

04
HOURS (L.S.T.)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.6	4.5	2.6	1.3								11.0	6.2
NNE	1.3	.6										1.9	3.3
NE	.6	.6	1.3									2.6	5.5
ENE	.6		1.3									1.9	6.0
E	2.6	1.9										4.5	3.4
ESE	3.9	3.2	.6	.6								8.4	4.5
SE	.6	3.2	2.6	.6								7.1	6.5
SSE	.6	1.3		.6	1.3							3.9	10.2
S	1.9		1.3									3.2	5.6
SSW			.6	1.3								1.9	12.0
SW			.6									.6	9.0
WSW		.6										.6	5.0
W	1.3	1.3	.6	.6								3.9	6.2
WNW	.6	.6	.6									1.9	5.7
NW	.6	3.9	1.3									5.8	5.1
NNW	2.6	3.2	2.6	1.3	.6							10.3	7.1
VARBL													
CALM												30.3	
	20.0	25.2	16.1	6.5	1.9							100.0	4.3

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

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STATION

ALAMEDA, CALIFORNIA
STATION NAME

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YEARS

DEC
MONTH

ALL WEATHER
CLASS

07
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.9	3.2	2.6	1.3	.6							11.6	6.2
NNE	1.9	1.3	.6									3.9	4.0
NIE			.6									.6	10.0
ENE	.6		.6	.6								1.9	7.0
E	3.9	3.2	.6	.6								8.4	4.4
ESE	3.2	3.9										7.1	3.4
SE	2.6	4.5	3.2	.6	.6							11.6	6.7
SSE	3.2	.6		1.3								5.2	5.3
S	1.3	.6		1.3								3.2	6.4
SSW	1.9	.6	.6									3.2	4.6
SW			.6									.6	10.0
WSW	.6			.6								1.3	8.0
W			.6	.6								1.3	11.5
WNW	.6	1.3		.6								2.6	6.0
NW	2.6	1.9	.6									5.2	3.8
NNW	1.3	2.6	3.2	.6	.6							8.4	7.1
VARBL													
CALM												23.9	
	27.7	23.9	14.2	8.4	1.9							100.0	4.3

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

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STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

DEC
MONTH

ALL WEATHER
CLASS

10
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.9	3.2	1.3	.6	1.3							10.3	6.6
NNE	.6	.6	.6									1.9	5.7
NE													
ENE		.6										.6	4.0
E	2.6	1.9										4.3	3.3
ESE	.6	3.2	1.3	1.3								6.3	6.8
SE	2.6	2.6	1.9	1.9	.6							9.7	6.9
SSE	5.8	3.9	1.3									11.0	4.1
S	5.8	1.9	.6									8.4	3.1
SSW													
SW	1.3											1.3	2.3
WSW	1.9	1.3		.6								3.9	5.2
W	.6	1.3	1.3	1.3								4.3	8.0
WNW		1.3										1.3	4.0
NW	.6	5.8		1.3								7.7	5.9
NNW	3.9	2.6	5.8	.6	.6							13.3	6.6
VAEBL													
CALA												14.8	
	30.3	30.3	14.2	7.7	2.6							100.0	4.8

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

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STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

DEC
MONTH

ALL WEATHER
CLASS

13
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	1.9	1.9	.6								6.3	6.2
NNE		.6	.6									1.3	7.5
NE		1.3										1.3	6.0
ENE			.6									.6	10.0
E			.6									.6	7.0
ESE		.6	.6									1.3	6.3
SE		1.3	1.3	2.6		.6						5.8	10.9
SSE	2.6	1.9			.6							5.2	5.8
S	3.2	5.2	1.3									9.7	4.7
SSW	3.9	1.3	.6									3.8	3.7
SW	3.2			.6								3.9	4.8
WSW	3.2											3.2	2.8
W	1.3	1.9	1.9	1.9								7.1	8.1
WNW		1.9	1.9									3.9	6.8
NW	2.6	5.2	7.1	2.6	.6							18.1	7.4
NNW	1.9	6.5	7.1	3.2	.6							19.4	8.0
VARB													
CALM												6.3	
	23.9	29.7	25.8	11.6	1.9	.6						100.0	6.4

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

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STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

DEC
MONTH

16

HOURS (L.S.T.)

ALL WEATHER
CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNOTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N		1.9	.6	1.9								4.5	10.1
NNE				.6								.6	11.0
NE			.6									.6	9.0
ENE		.6	.6									1.3	6.5
E		.6	1.3									1.9	7.3
ESE		.6										.6	5.0
SE	1.3	1.9		2.6		.6						6.5	9.2
SSE	1.3	2.6	.6	1.3								5.8	6.7
S	3.2	2.6	.6	.6								7.1	4.1
SSW	1.3		.6									1.9	3.3
SW	1.9											1.9	2.3
WSW	1.3	1.3										2.6	3.3
W	1.9	5.8	6.5	1.9								16.1	7.0
WNW	1.9	4.5	3.9	1.3								11.6	6.3
NW	1.9	9.0	5.8	1.9								18.7	6.6
NNW	1.3	6.5	2.6	1.3								11.6	6.6
VARBL													
CALM												6.5	
	17.4	38.1	23.9	13.5		.6						100.0	6.2

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

DEC
MONTH

ALL WEATHER
CLASS

19
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.6	1.9	1.9	.6	1.3							8.4	7.2
NNE	1.3	.6										1.9	3.3
NE													
ENE	.6											.6	1.0
E	1.3											1.3	2.0
ESE	2.6											2.6	2.0
SE	.6	.6		2.6								3.9	10.7
SSE	1.9	1.3	.6	1.3								5.2	6.1
S	2.6	.6		.6								3.9	4.0
SSW		1.3										1.3	5.5
SW	.6			.6								1.3	6.5
WSW	1.9	1.3										3.2	3.8
W	1.3	2.6	1.3	1.3								6.5	6.5
WNW	3.9	1.9	1.9									7.7	4.3
NW	1.9	3.9	1.9	1.3								9.0	6.6
NNW	5.2	9.7	1.3	.6								16.8	4.7
VARBL													
CALM												26.5	
	28.4	25.8	9.0	9.0	1.3							100.0	4.1

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

DEC
MONTH

ALL WEATHER
CLASS

22
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.6	2.6		2.6	1.3							9.0	8.1
NNE	.6	1.3		.6								2.6	6.0
NE	.6											.6	1.0
ENE	.6	.6										1.3	3.0
E	6.5	1.9										8.4	2.8
ESE	5.2	.6		.6								6.5	3.5
SE	.6	2.6	1.3	1.9	1.3							7.7	10.0
SSE	2.6	.6		.6								3.9	4.8
S	.6	.6	.6	.6								2.6	7.3
SSW				.6								.6	16.0
SW	1.3	.6										1.9	3.3
WSW													
W	.6		.6									1.3	4.5
WNW	.6	1.3	.6									2.6	4.5
NW		4.5	2.6									7.1	6.4
NNW	3.9	5.8	1.9	.6								12.3	5.1
VARBL													
CALM												31.6	
	26.5	23.2	7.7	8.4	2.6							100.0	4.0

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

DEC
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.9	2.9	1.5	1.3	.6	.1						9.3	6.8
NNE	.9	.6	.2	.2								1.9	4.9
NE	.3	.2	.4									1.0	5.4
ENE	.4	.3	.4	.1								1.2	5.3
E	2.6	1.6	.3	.1								4.6	3.6
ESE	2.2	1.9	.4	.4								4.9	4.6
SE	1.5	2.3	1.5	1.8	.3	.2						7.6	7.9
SSE	2.3	1.5	.3	.7	.2							5.1	5.9
S	2.6	1.7	.6	.5								5.4	4.7
SSW	1.0	.5	.3	.2								2.0	5.5
SW	1.0	.2	.3	.2		.1						1.9	6.3
WSW	1.1	.6		.2								1.9	4.6
W	1.0	1.7	1.6	1.0								5.2	7.1
WNW	1.0	1.6	1.2	.2								4.1	5.5
NW	1.5	5.0	2.4	.9	.1							9.9	6.1
NNW	2.7	4.9	3.3	1.1	.4							12.5	6.4
VAREL													
CAUA												21.5	
	25.1	27.7	14.9	9.0	1.6	.3						100.0	4.7

TOTAL NUMBER OF OBSERVATIONS

1240

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77
YEARS

ALL
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.7	1.9	1.2	.6	.1	.0						5.5	6.2
NNE	.6	.5	.3	.1	.0							1.5	5.3
NE	.3	.2	.2	.0	.0							.7	5.0
ENE	.3	.2	.1	.0								.7	4.7
E	1.1	.6	.2	.0								1.8	3.7
ESE	.9	1.0	.5	.2	.0							2.6	5.4
SE	.5	1.0	.6	.6	.2	.0						3.0	7.9
SSE	.7	.9	.6	.3	.2	.0						2.8	7.0
S	1.5	1.7	1.0	.7	.1	.0						5.1	6.4
SSW	.9	1.3	.9	.2	.0	.0						3.3	5.8
SW	.9	1.9	1.9	.6	.0	.0						5.3	6.7
WSW	1.4	3.1	3.8	2.1	.1							10.6	7.7
W	1.9	4.7	9.4	8.6	1.1	.1						25.8	9.5
WNW	1.1	2.3	3.1	2.3	.3	.1						9.3	8.5
NW	1.0	2.3	1.9	.9	.1	.0						6.2	7.0
NNW	1.2	2.0	1.7	.9	.2	.0						6.1	7.0
VARBL													
CALM												9.8	
	16.0	25.7	27.4	18.2	2.6	.4						100.0	6.9

TOTAL NUMBER OF OBSERVATIONS

14607

NAVAL WEATHER SERVICE
DETACHMENT
ASHEVILLE, NC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

23239
STATION

ALAMEDA, CALIFORNIA

73-77

STATION NAME

YEARS

ALL
MONTH

INSTRUMENT

CLASS

ALL
HOURS (L.S.T.)

CIG 200 TO 1400 FT W/VSBY 1/2 MI OR MORE,

CONDITION

AND/OR VSBY 1/2 TO 2-1/2 MI W/CIG 200 FT OR MORE

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	.7	.4	.0								2.0	4.8
NNE	.2	.2	.1									.5	4.6
NE	.1		.0									.1	4.7
ENE	.1	.1										.2	3.5
E	.5	.2	.0									.7	3.4
ESE	.4	.6	.8	.4								2.2	7.2
SE	.5	1.1	.5	.8	.3							3.1	8.4
SSE	.7	.5	.6	.5	.2							2.5	7.7
S	1.5	1.9	1.2	.7	.1	.2						5.5	6.8
SSW	1.3	1.9	1.5	.3								5.0	5.9
SW	1.2	3.8	4.3	1.4		.0						10.8	7.1
WSW	2.0	5.9	7.0	2.9	.1							17.9	7.3
W	2.3	6.9	13.2	6.0	.4	.0						29.0	8.3
WNW	.9	2.4	2.0	.5	.1							5.9	6.7
NW	.6	2.2	.5	.1								3.3	5.2
NNW	.6	1.0	.7	.3	.0							2.8	6.3
VARBL												8.6	
CALM													
	13.6	29.3	33.0	14.0	1.2	.3						100.0	6.6

TOTAL NUMBER OF OBSERVATIONS

2325

DIRNAVOCEANMET SMOS

NWSD, Federal Building

Asheville, N. C.

PART D CEILING VERSUS VISIBILITY

This summary is a bivariate percentage frequency distribution by classes of ceiling from zero to equal to or greater than 20,000 feet and as a separate class "no ceiling", versus visibility in 16 classes from zero to equal to or greater than 10 miles. Data are derived from 3-hourly observations, and three sets of tables are presented as follows:

1. Annual - all years and all hours combined
2. By month - all years and all hours combined
3. By month - by standard 3-hour groups

Due to the cumulative nature of this presentation, it is possible to determine the percentage frequency of occurrence for any given limit of ceiling or visibility separately, or in combination of ceiling and visibility. The totals progress to the right and downward. Ceiling may be determined independently by referring to totals in the extreme right hand column. Also, visibility may be determined independently by reference to the horizontal row of totals at the bottom of the page. The percentage frequency for which the station was meeting or exceeding any given set of minima may be determined from the figure at the intersection of the appropriate ceiling column and visibility row. Several examples in the use of these tables are shown on pages 2 and 3 below.

U. S. Weather Bureau and Navy stations did not report ceilings within the range 10,000 feet and higher prior to January 1949. Summaries prepared from data for these stations using the earlier period and data subsequent to January 1949 will be modified to limit ceilings to 10,000 feet. Short periods of record prior to 1949 for these stations will be eliminated from the summary. For Air Force stations, the "no ceiling" category includes clear and scattered conditions, and ceilings above 20,000 feet for period through June 1948. Beginning in July 1948 for Air Force stations and January 1949 for USWB and U. S. Navy stations the "no ceiling" category consists of observations with less than 6/10 total sky cover and those cases where total sky cover is 6/10 or more, but not more than 1/2 of the sky cover is opaque.

EXAMPLES FOR USE OF CEILING VERSUS VISIBILITY TABLES IN THIS TABULATION

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING													
≥ 1800													
≥ 1500					91.0								92.6
≥ 1200													
≥ 1000													
≥ 900													
≥ 800													
≥ 700													
≥ 600													
≥ 500										97.4			98.1
≥ 400													
≥ 300													
≥ 200													
≥ 100													
0					95.4		96.9			98.3			100.0

EXAMPLE # 1 Read ceiling values independently of visibility under column at right headed ≥ 0.
For instance, from the table: Ceiling ≥ 1500 feet = 92.6%.

Ceiling ≥ 500 feet = 98.1%.

EXAMPLE # 2 Read visibilities independently of ceilings on bottom line opposite ≥ 0. From the table:
Visibility ≥ 3 miles = 95.4%.
Visibility ≥ 2 miles = 96.9%.
Visibility ≥ 1 mile = 98.3%.

EXAMPLE # 3 To obtain combinations of ceiling with visibility, read figure at intersection of the two categories; i.e.: Ceiling ≥ 1500 feet with visibility ≥ 3 miles = 91.0%.

PART D

ADDITIONAL EXAMPLES

EXAMPLE # 4

Values below minimums stated in the table may be obtained by subtracting the value given in the table from 100%.

Thus, to obtain the percentage of observations with ceiling < 1500 feet and/or visibility < 3 miles, subtract the value read from the table at the intersection, which is 91.0, from 100.0. The answer 9.0 is the percentage of observations with ceiling < 1500 feet and/or visibility < 3 miles.

Likewise, the percentage of observations with ceiling < 500 feet and/or visibility < 1 mile is 2.6, obtained by subtracting 97.4 from 100.0.

EXAMPLE # 5

To find the percentage of observations falling within the two categories given in example above, subtract the value read from the table for the first set of limits from the value in the table for the second set of limits. The difference will be the percentage of observations meeting the lower set of limits, but not meeting the higher set of limits.

The value 91.0 read from the table at the intersection of ≥ 1500 feet with ≥ 3 miles, subtracted from 97.4 read from the table at the intersection of ≥ 500 feet with ≥ 1 mile is equal to 6.4%. Thus; 6.4 percent of the observations meet the criteria: "ceiling ≥ 500 feet with visibility ≥ 1 mile, but < 3 miles; or ceiling ≥ 500 feet, but < 1500 feet with visibility ≥ 1 mile."

Since these tabulations are prepared in several ways including by month, by 3-hour groups it is possible to determine diurnal variations of ceiling and visibility limits as well as probabilities of various ceiling-visibility combinations.

PART D

SKY COVER

This summary is prepared from 3-hourly observations and is a percentage frequency distribution of total sky cover by tenths, plus mean sky cover, and total number of observations. It is presented in two tables as follows:

1. By month and annual - all hours and all years combined.
2. By month - by standard 3-hour groups.

NOTE: # 1: Sky cover (total cloud amount) was not reported by U. S. Services until mid 1945. Data, when available, were punched for Air Force stations beginning in 1946, but were not available for Navy stations until 1948 or 1949. Weather Bureau stations recorded total cloud amount in remarks beginning sometime in 1945, but few stations have punched data prior to 1948. This summary will, of course, be limited to period of available data.

NOTE: # 2: Some sources of punched data used for this summary report cloud amounts in oktas. These have been converted to tenths prior to summarizing, and notation is made on the form to indicate that data were originally reported in oktas. The manner of conversion is given below:

OKTAS

0
1
2
3
4
5
6
7
8

(or obscured)

TENTHS

0
1
2
3
4
5
6
8
9
10

CEILING VERSUS VISIBILITY

ALAMEDA, CALIFORNIA

73-77

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURLY (A.M., P.M.)

3127

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

1111

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	32.3	55.5	60.0	63.9	64.5	64.5	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 20000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
18000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
16000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
14000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
12000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
10000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
9000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
8000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
7000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
6000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
5000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
4500	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
4000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
3500	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
3000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
2500	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
2000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
1800	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
1500	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
1200	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
1000	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
900	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
800	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
700	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
600	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
500	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
400	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
300	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
200	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
100	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4
0	32.3	57.4	63.2	67.1	67.7	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4

TOTAL NUMBER OF OBSERVATIONS

155

NAWWEASERVCOM

CEILING VERSUS VISIBILITY

ALAMEDA, CALIFORNIA

73-77

1973-1977

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	30.3	47.7	52.3	58.1	59.4	60.0	60.7	60.7	60.7	60.7	60.7	60.7
≥ 20000	30.3	49.0	54.8	60.7	61.9	62.6	63.2	63.2	63.2	63.2	63.2	63.2
18000	30.3	49.0	54.8	60.7	61.9	62.6	63.2	63.2	63.2	63.2	63.2	63.2
16000	30.3	49.0	54.8	60.7	61.9	62.6	63.2	63.2	63.2	63.2	63.2	63.2
14000	31.0	49.7	55.5	61.3	62.6	63.2	63.9	63.9	63.9	63.9	63.9	63.9
12000	31.6	50.3	56.1	61.9	63.2	63.9	64.5	64.5	64.5	64.5	64.5	64.5
10000	32.3	51.0	56.8	62.6	63.9	64.5	65.2	65.2	65.2	65.2	65.2	65.2
8000	32.3	51.0	56.8	62.6	63.9	64.5	65.2	65.2	65.2	65.2	65.2	65.2
7000	32.3	51.0	56.8	62.6	63.9	64.5	65.2	65.2	65.2	65.2	65.2	65.2
6000	32.9	53.6	59.4	65.2	66.5	67.1	67.7	67.7	67.7	67.7	67.7	67.7
5000	32.9	53.6	60.0	67.1	68.4	69.0	69.7	69.7	69.7	69.7	69.7	69.7
4500	33.6	54.2	60.7	67.7	69.0	69.7	70.3	70.3	70.3	70.3	70.3	70.3
4000	34.8	55.5	61.9	69.7	71.0	71.6	72.3	72.3	72.3	72.3	72.3	72.3
3500	34.8	56.8	63.2	71.0	72.3	72.9	73.6	73.6	73.6	73.6	73.6	73.6
3000	35.5	57.4	63.9	71.6	72.9	73.6	74.2	74.2	74.2	74.2	74.2	74.2
2500	36.1	58.1	64.5	72.3	73.6	74.2	74.8	74.8	74.8	74.8	74.8	74.8
2000	36.8	61.3	68.4	76.1	77.4	78.1	79.4	79.4	79.4	79.4	79.4	79.4
1800	38.7	64.5	72.3	80.0	81.3	81.9	83.2	83.2	83.2	83.2	83.2	83.2
1500	38.7	65.8	74.2	82.6	83.9	85.2	86.5	86.5	86.5	86.5	86.5	86.5
1200	38.7	65.8	74.2	82.6	83.9	85.2	86.5	86.5	86.5	86.5	86.5	86.5
1000	38.7	66.5	74.8	83.9	85.2	87.1	88.4	88.4	88.4	88.4	88.4	88.4
900	38.7	67.7	76.1	85.2	87.1	88.4	89.7	89.7	89.7	89.7	89.7	89.7
800	39.4	68.4	76.8	85.8	87.7	89.0	91.0	91.0	91.0	91.0	91.0	91.0
700	39.4	69.0	77.4	86.5	89.0	90.3	92.3	92.3	92.3	92.3	92.3	92.3
600	39.4	69.7	78.1	87.1	89.7	91.0	92.9	92.9	92.9	92.9	92.9	92.9
500	39.4	69.7	78.1	87.1	89.0	91.6	94.8	94.8	94.8	94.8	94.8	94.8
400	39.4	69.7	78.1	87.1	89.0	91.6	94.8	94.8	94.8	94.8	94.8	94.8
300	39.4	69.7	78.1	87.1	89.0	91.6	94.8	94.8	94.8	94.8	94.8	94.8
200	39.4	69.7	78.1	87.1	89.0	91.6	94.8	94.8	94.8	94.8	94.8	94.8
100	39.4	69.7	78.1	87.1	89.0	91.6	94.8	94.8	94.8	94.8	94.8	94.8
0	39.4	69.7	78.1	87.1	89.0	91.6	94.8	94.8	94.8	94.8	94.8	94.8

TOTAL NUMBER OF OBSERVATIONS 153

22229 ALAMEDA, CALIFORNIA

73-77

YEAR

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURLY (U.S.T.)

THIS PAGE IS BEST QUALITY PRACTICEABLE

CEILING (FEET)	VISIBILITY (STATUTE MILES)													FROM COPY FURNISHED TO DDC	
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	23.9	40.0	47.1	51.6	56.1	56.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	58.1
≥ 20000	24.5	41.3	48.4	52.9	58.1	59.4	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.7
18000	24.5	41.3	48.4	52.9	58.1	59.4	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.7
16000	24.5	41.3	48.4	52.9	58.1	59.4	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.7
14000	25.2	42.6	49.7	54.2	59.4	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.9
12000	26.5	44.5	51.6	56.1	61.3	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.9
10000	27.1	45.8	53.6	58.1	63.2	64.5	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.8
9000	27.7	46.5	54.2	58.7	63.9	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	66.5
8000	27.7	47.1	54.8	59.4	64.5	65.8	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	67.1
7000	28.4	47.7	56.1	60.7	65.8	67.1	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	68.4
6000	28.4	48.4	56.8	61.9	67.1	68.4	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.7
5000	28.4	48.4	56.8	61.9	67.1	68.4	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.7
4500	28.4	49.0	57.4	62.6	67.7	69.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	70.3
4000	28.4	49.0	57.4	62.6	67.7	69.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	70.3
3500	28.4	49.7	58.1	63.9	69.0	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.6
3000	29.0	52.3	61.3	67.1	72.3	73.6	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.8
2500	30.3	56.8	64.5	71.0	76.1	77.4	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.7
2000	31.0	59.4	69.0	76.1	81.3	83.2	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	84.5
1800	31.0	59.4	69.0	76.1	81.3	83.2	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	84.5
1500	31.0	61.3	71.0	78.1	83.2	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	87.1
1200	31.6	62.6	72.3	79.4	85.2	87.7	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	89.0
1000	31.6	63.9	73.6	80.7	86.5	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	90.3
900	31.6	63.9	73.6	80.7	86.5	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	90.3
800	32.3	65.2	76.8	81.9	87.7	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.6
700	32.3	65.8	78.5	82.6	88.4	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	92.3
600	32.3	66.5	79.1	83.2	89.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.9
500	32.3	66.5	79.1	83.2	89.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.9
400	32.3	66.5	79.1	83.2	89.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.9
300	32.3	66.5	79.1	83.2	89.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.9
200	32.3	66.5	79.1	83.2	89.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.9
100	32.3	66.5	79.1	83.2	89.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.9
0	32.3	66.5	79.1	83.2	89.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.9

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

JAN

HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	24.5	36.8	45.2	51.0	54.8	58.1	60.0	60.7	60.7	60.7	60.7	60.7	60.7	61.3
AI 20000	25.8	38.7	47.1	53.6	58.1	61.9	63.9	64.5	64.5	64.5	64.5	64.5	64.5	65.2
AI 18000	25.8	38.7	47.1	54.2	58.7	62.6	64.5	65.2	65.2	65.2	65.2	65.2	65.2	65.8
AI 16000	25.8	39.4	47.7	54.8	59.4	63.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8	66.5
AI 14000	25.8	39.4	47.7	54.8	59.4	63.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8	66.5
AI 12000	26.5	41.3	49.7	57.4	61.9	65.8	68.4	69.0	69.0	69.0	69.0	69.0	69.0	69.7
AI 10000	26.5	41.9	50.3	58.7	63.2	67.1	69.7	70.3	70.3	70.3	70.3	70.3	70.3	71.0
AI 9000	26.5	41.9	50.3	58.7	63.2	67.1	69.7	70.3	70.3	70.3	70.3	70.3	70.3	71.0
AI 8000	27.1	42.6	51.0	60.0	64.5	68.4	71.0	71.6	71.6	71.6	71.6	71.6	71.6	72.3
AI 7000	27.1	43.2	51.6	60.7	65.2	69.0	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.9
AI 6000	27.7	43.9	52.3	61.3	65.8	69.7	72.3	72.9	72.9	72.9	72.9	72.9	72.9	73.6
AI 5000	27.7	43.9	52.3	61.3	65.8	69.7	72.3	72.9	72.9	72.9	72.9	72.9	72.9	73.6
AI 4500	28.4	46.5	54.8	63.9	68.4	72.3	74.8	75.5	75.5	75.5	75.5	75.5	75.5	76.1
AI 4000	29.0	47.7	56.1	65.8	70.3	74.2	76.8	77.4	77.4	77.4	77.4	77.4	77.4	78.1
AI 3500	29.0	49.0	57.4	67.7	72.3	76.1	78.7	79.4	79.4	79.4	79.4	79.4	79.4	80.0
AI 3000	29.7	52.3	60.7	71.0	75.5	79.4	81.9	82.6	82.6	82.6	82.6	82.6	82.6	83.2
AI 2500	29.7	52.9	61.9	72.3	76.8	80.7	83.2	83.9	83.9	83.9	83.9	83.9	83.9	84.5
AI 2000	31.0	56.1	65.8	76.8	81.3	85.2	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.7
AI 1800	31.6	56.8	66.5	77.4	81.9	85.8	89.0	89.7	89.7	89.7	89.7	89.7	89.7	90.3
AI 1500	31.6	57.4	67.1	78.1	82.6	86.5	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.6
AI 1200	31.6	58.7	68.4	79.4	83.9	87.7	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.9
AI 1000	31.6	59.4	69.0	80.7	84.2	89.0	92.9	93.6	93.6	93.6	93.6	93.6	93.6	94.2
AI 900	31.6	59.4	69.0	80.7	84.2	89.0	92.9	93.6	93.6	93.6	93.6	93.6	93.6	94.2
AI 800	31.6	59.4	69.0	80.7	84.2	89.0	92.9	93.6	93.6	93.6	93.6	93.6	93.6	94.2
AI 700	31.6	59.4	69.0	80.7	84.2	89.0	92.9	93.6	93.6	93.6	93.6	93.6	93.6	94.2
AI 600	31.6	59.4	69.0	80.7	84.2	89.0	92.9	93.6	93.6	93.6	93.6	93.6	93.6	94.2
AI 500	31.6	59.4	69.0	80.7	84.2	89.0	92.9	93.6	93.6	93.6	93.6	93.6	93.6	94.2
AI 400	31.6	59.4	69.0	80.7	84.2	89.0	92.9	93.6	93.6	93.6	93.6	93.6	93.6	94.2
AI 300	31.6	59.4	69.0	80.7	84.2	89.0	92.9	93.6	93.6	93.6	93.6	93.6	93.6	94.2
AI 200	31.6	59.4	69.0	80.7	84.2	89.0	92.9	93.6	93.6	93.6	93.6	93.6	93.6	94.2
AI 100	31.6	59.4	69.0	80.7	84.2	89.0	92.9	93.6	93.6	93.6	93.6	93.6	93.6	94.2
AI 0	31.6	59.4	69.0	80.7	84.2	89.0	92.9	93.6	93.6	93.6	93.6	93.6	93.6	94.2

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

22229 ALAMEDA, CALIFORNIA

73-77

YEARS

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

12
HOURS (P. T.)

3123

HHH

5703 CEILING VERSUS VISIBILITY JAN 68

HHH

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	23.9	38.1	43.9	51.6	58.7	60.7	62.6	62.6	62.6	62.6	63.2	63.2
≥ 20000	25.2	40.7	47.1	55.5	63.2	65.8	67.7	67.7	67.7	67.7	68.4	68.4
18000	25.2	41.3	48.4	56.8	64.5	67.1	69.0	69.0	69.0	69.0	69.7	69.7
16000	25.2	41.3	48.4	56.8	64.5	67.1	69.0	69.0	69.0	69.0	69.7	69.7
14000	25.2	41.3	48.4	56.8	64.5	67.1	69.0	69.0	69.0	69.0	69.7	69.7
12000	26.5	43.9	51.0	60.0	67.7	70.3	72.9	72.9	72.9	72.9	73.6	73.6
10000	27.1	44.5	51.6	61.3	69.0	71.6	74.2	74.2	74.2	74.2	74.8	74.8
9000	27.7	45.2	52.3	61.9	69.7	72.3	74.8	74.8	74.8	74.8	75.5	75.5
8000	29.0	47.7	54.8	64.5	72.3	74.8	77.4	77.4	77.4	77.4	78.1	78.1
7000	29.0	48.4	55.5	65.2	72.9	75.5	78.1	78.1	78.1	78.1	78.7	78.7
6000	29.0	49.0	56.1	65.8	73.6	76.1	78.7	78.7	78.7	78.7	79.4	79.4
5000	29.0	50.3	57.4	67.1	74.8	77.4	80.0	80.0	80.0	80.0	80.7	80.7
4500	30.3	52.3	59.4	69.0	76.8	79.4	81.9	81.9	81.9	82.6	83.2	83.2
4000	31.6	54.2	61.3	71.0	78.7	81.3	83.9	83.9	83.9	84.5	85.2	85.2
3500	31.6	54.2	61.3	71.0	78.7	81.3	83.9	83.9	83.9	84.5	85.2	85.2
3000	32.3	55.5	63.2	72.9	80.7	83.2	86.5	86.5	86.5	87.1	87.7	87.7
2500	32.3	56.8	64.5	74.2	82.6	85.2	88.4	88.4	88.4	89.0	89.7	89.7
2000	32.9	58.7	66.5	76.8	85.2	87.7	91.0	91.0	91.0	91.6	92.3	92.3
1800	32.9	58.7	66.5	76.8	85.2	87.7	91.0	91.0	91.0	91.6	92.3	92.3
1500	33.6	60.0	67.7	78.7	87.7	90.3	93.6	93.6	93.6	94.2	94.8	94.8
1200	33.6	60.0	67.7	78.7	87.7	90.3	93.6	93.6	93.6	94.2	94.8	94.8
1000	33.6	60.7	68.4	80.0	89.0	91.6	94.8	95.5	95.5	96.1	96.8	96.8
900	33.6	60.7	68.4	80.0	89.0	91.6	94.8	95.5	95.5	96.1	96.8	96.8
800	33.6	60.7	68.4	80.0	89.0	91.6	94.8	95.5	95.5	96.1	96.8	96.8
700	33.6	60.7	68.4	80.0	89.0	91.6	94.8	95.5	95.5	96.1	96.8	96.8
600	33.6	60.7	68.4	80.0	89.0	92.3	95.5	96.1	96.1	96.8	97.4	97.4
500	33.6	60.7	68.4	80.0	89.0	92.3	95.5	96.1	96.1	96.8	97.4	97.4
400	33.6	61.3	69.0	80.7	89.7	92.9	96.1	97.4	98.1	98.7	99.4	99.4
300	33.6	61.3	69.0	80.7	89.7	92.9	96.1	97.4	98.1	98.7	99.4	99.4
200	33.6	61.3	69.0	80.7	89.7	92.9	96.1	97.4	98.1	98.7	99.4	99.4
100	33.6	61.3	69.0	80.7	89.7	92.9	96.1	97.4	98.1	98.7	99.4	99.4
0	33.6	61.3	69.0	80.7	89.7	92.9	96.1	97.4	98.1	98.7	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

23239

ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

JAN

16
HOURS (U.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	27.7	45.2	54.2	60.7	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 20000	27.7	48.4	59.4	67.7	69.7	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 18000	27.7	48.4	59.4	67.7	69.7	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 16000	27.7	48.4	59.4	67.7	69.7	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 14000	27.7	48.4	59.4	67.7	69.7	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 12000	27.7	49.0	60.7	69.7	71.6	72.3	72.9	72.9	72.9	72.9	72.9	72.9	72.9
≥ 10000	29.0	51.6	63.2	72.3	74.2	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 9000	29.0	51.6	63.2	72.3	74.2	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 8000	29.7	52.3	64.5	73.6	75.5	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 7000	30.3	53.6	65.8	74.8	76.8	78.1	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 6000	30.3	54.2	66.5	75.5	77.4	78.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4
≥ 5000	31.6	56.1	68.4	77.4	79.4	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 4500	31.6	57.4	69.7	78.7	80.7	81.9	82.6	82.6	82.6	82.6	82.6	82.6	82.6
≥ 4000	31.6	58.1	70.3	79.4	81.3	82.6	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 3500	33.6	61.9	74.2	83.2	85.2	86.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 3000	33.6	63.2	75.5	84.5	86.5	87.7	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 2500	33.6	65.9	76.1	85.2	87.1	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 2000	33.6	65.8	78.1	87.7	89.7	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 1800	33.6	65.8	78.1	88.4	91.0	92.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1500	33.6	66.5	78.7	89.0	91.6	92.9	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 1200	33.6	67.7	80.0	90.3	92.9	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1000	33.6	68.4	80.7	91.0	93.6	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 900	33.6	69.0	81.3	91.6	94.2	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 800	33.6	69.0	81.3	91.6	94.2	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 700	33.6	69.0	81.3	91.6	94.2	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 600	33.6	69.0	81.3	91.6	94.2	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 500	33.6	69.0	81.3	91.6	94.2	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 400	33.6	69.0	81.3	91.6	94.2	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	33.6	69.0	81.3	91.6	94.2	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	33.6	69.0	81.3	91.6	94.2	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	33.6	69.0	81.3	91.6	94.2	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 0	33.6	69.0	81.3	91.6	94.2	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

ALABAMA, CALIFORNIA

73-77

YEARS

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18
HOURS (L.S.T.)

3121

RRR

5703 CEILING VERSUS VISIBILITY JAN 68

1234-18766

RRR

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾
NO CEILING	38.1	68.4	70.3	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
AI 20000	38.1	69.7	71.6	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
AI 18000	38.1	69.7	71.6	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
AI 16000	38.1	69.7	71.6	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
AI 14000	38.1	71.0	73.6	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
AI 12000	38.1	71.6	74.2	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
AI 10000	38.1	72.9	75.5	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
AI 8000	38.1	72.9	75.5	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
AI 7000	38.7	74.2	76.8	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
AI 6000	39.4	74.8	77.4	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
AI 5000	39.4	75.5	78.1	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
AI 4500	40.0	76.8	79.4	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
AI 4000	40.7	79.4	81.9	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
AI 3500	41.9	81.9	84.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
AI 3000	41.9	82.6	85.2	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
AI 2500	41.9	82.6	85.2	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
AI 2000	42.6	83.2	85.8	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
AI 1800	43.2	84.5	87.1	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
AI 1500	44.5	87.1	90.3	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
AI 1200	44.5	87.7	91.0	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
AI 1000	44.5	88.4	91.6	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
AI 900	44.5	89.0	92.3	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
AI 800	44.5	89.0	92.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
AI 700	44.5	89.7	92.9	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
AI 600	44.5	90.3	93.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 500	44.5	90.3	93.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 400	44.5	90.3	93.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 300	44.5	90.3	93.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 200	44.5	90.3	93.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 100	44.5	90.3	93.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	44.5	90.3	93.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

23239 — ALAMEDA, CALIFORNIA — 73-77 — YEARS — JAN — MONTH — 22 — HOUR — P. M. —
 PERCENTAGE FREQUENCY OF OCCURRENCE
 (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	35.5	61.9	66.5	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 20000	35.5	64.5	69.0	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
18000	35.5	64.5	69.0	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
16000	35.5	64.5	69.0	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
14000	35.5	64.5	69.0	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
12000	35.5	64.5	69.0	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
10000	36.1	67.7	73.6	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
9000	36.1	67.7	73.6	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
8000	37.4	69.7	75.5	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
7000	38.1	71.6	77.4	78.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
6000	38.1	72.3	78.1	79.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
5000	38.1	74.2	80.0	81.3	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
4500	38.1	75.5	81.3	82.6	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
4000	38.7	76.8	82.6	83.9	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
3500	38.7	76.8	82.6	83.9	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
3000	38.7	77.4	83.2	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
2500	39.4	78.1	83.9	85.2	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
2000	40.0	80.7	86.5	87.7	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
1800	40.0	80.7	86.5	87.7	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
1500	40.7	82.6	88.4	89.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
1200	41.3	84.5	90.3	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
1000	41.3	86.5	92.9	94.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
900	41.3	87.1	93.6	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
800	41.3	87.1	93.6	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
700	41.3	87.7	94.2	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
600	41.3	87.7	94.2	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
500	41.3	87.7	94.2	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
400	41.3	87.7	94.2	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
300	41.3	87.7	94.2	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
200	41.3	87.7	94.2	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
100	41.3	87.7	94.2	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
0	41.3	87.7	94.2	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURLY
A.M.

3119

MAN

5703 CEILING VERSUS VISIBILITY JAN 68

MAN

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	29.5	49.2	54.9	59.6	62.0	62.8	63.6	63.7	63.7	63.7	63.8	63.8
≥ 20000	29.9	51.2	57.6	62.7	65.4	66.5	67.3	67.4	67.4	67.4	67.5	67.5
18000	29.9	51.3	57.7	63.0	65.7	66.8	67.6	67.7	67.7	67.7	67.7	67.7
≥ 16000	29.9	51.4	57.8	63.1	65.7	66.9	67.7	67.7	67.7	67.7	67.8	67.8
14000	30.1	51.6	58.3	63.6	66.2	67.3	68.2	68.2	68.2	68.2	68.3	68.3
≥ 12000	30.7	52.9	59.5	65.0	67.7	68.8	69.8	69.8	69.8	69.8	69.9	69.9
10000	31.2	54.4	61.3	67.0	69.8	70.9	71.9	71.9	71.9	71.9	72.0	72.0
≥ 9000	31.5	54.8	61.6	67.3	70.1	71.2	72.2	72.3	72.3	72.3	72.3	72.3
8000	32.0	56.0	62.9	68.8	71.5	72.7	73.6	73.7	73.7	73.7	73.8	73.8
≥ 7000	32.5	56.9	64.0	69.8	72.7	73.9	74.8	74.9	74.9	74.9	75.0	75.0
6000	32.7	57.6	64.7	70.8	73.6	74.8	75.8	75.9	75.9	75.9	76.0	76.0
≥ 5000	33.2	58.4	65.7	71.9	74.7	75.9	76.9	76.9	76.9	76.9	77.0	77.0
4500	33.7	60.2	67.3	73.6	76.4	77.6	78.6	78.6	78.6	78.6	78.8	78.8
≥ 4000	34.2	61.4	68.5	74.8	77.6	78.8	79.8	79.8	79.8	79.8	80.0	80.0
3500	34.5	62.3	69.4	75.9	78.7	79.9	80.9	81.0	81.0	81.1	81.1	81.1
≥ 3000	34.9	63.8	71.1	77.7	80.5	81.7	82.7	82.8	82.8	82.9	83.0	83.0
2500	35.3	65.0	72.5	79.2	82.1	83.4	84.3	84.6	84.6	84.7	84.8	84.8
≥ 2000	36.1	67.6	75.2	82.3	85.2	86.5	87.7	87.8	87.8	87.9	88.0	88.0
1800	36.4	68.2	76.0	83.1	86.1	87.4	88.6	88.7	88.7	88.8	88.9	88.9
≥ 1500	36.5	69.4	77.3	84.5	87.6	89.1	90.5	90.6	90.6	90.7	90.7	90.7
1200	36.7	70.5	78.4	85.7	88.8	90.3	91.8	91.9	91.9	91.9	92.0	92.0
≥ 1000	36.7	71.3	79.4	87.0	90.3	91.9	93.4	93.6	93.6	93.7	93.8	93.8
900	36.7	71.8	79.9	87.6	91.0	92.6	94.0	94.4	94.4	94.4	94.5	94.5
≥ 800	36.9	72.0	80.2	87.9	91.3	92.9	94.4	94.8	94.8	94.8	95.0	95.0
700	36.9	72.5	80.7	88.4	91.9	93.6	95.1	95.5	95.5	95.6	95.7	95.7
≥ 600	36.9	72.7	81.0	88.7	92.3	94.0	95.5	95.9	96.0	96.1	96.1	96.2
500	36.9	72.7	81.0	89.0	92.6	94.4	96.1	96.5	96.5	96.8	96.9	96.9
≥ 400	36.9	72.8	81.1	89.2	93.1	94.9	96.7	97.3	97.4	97.7	97.7	97.8
300	36.9	72.8	81.1	89.2	93.1	94.9	96.7	97.3	97.4	97.7	97.8	97.8
≥ 200	36.9	72.8	81.1	89.2	93.1	94.9	96.7	97.3	97.4	97.7	97.8	97.8
100	36.9	72.8	81.1	89.2	93.1	94.9	96.7	97.3	97.4	97.7	97.8	97.8
0	36.9	72.8	81.1	89.2	93.1	94.9	96.7	97.3	97.4	97.7	97.8	97.8

TOTAL NUMBER OF OBSERVATIONS

1240

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

558
HOURS

YEARS

73-77

ALAMEDA, CALIFORNIA

23239

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

0.1
HOURS (P. M. T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	31.9	55.3	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
≥ 20000	35.5	61.7	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1
≥ 18000	35.5	61.7	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1
≥ 16000	35.5	61.7	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1
≥ 14000	35.5	61.7	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1
≥ 12000	36.9	63.1	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 10000	36.9	63.8	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
≥ 9000	36.9	64.5	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
≥ 8000	36.9	65.3	66.7	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
≥ 7000	40.4	69.5	70.9	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 6000	41.8	70.9	72.3	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
≥ 5000	43.3	73.8	75.2	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
≥ 4500	43.3	74.5	75.9	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
≥ 4000	43.3	75.9	77.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 3500	44.7	77.3	78.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
≥ 3000	46.8	80.9	82.3	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
≥ 2500	47.5	81.6	83.0	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
≥ 2000	48.9	84.4	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 1800	49.7	85.1	86.5	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
≥ 1500	50.4	87.2	88.7	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 1200	51.1	87.9	89.4	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
≥ 1000	51.1	87.9	90.1	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 900	51.1	87.9	90.1	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 800	51.1	88.7	90.8	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 700	51.1	90.1	92.2	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 600	51.1	92.2	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 500	51.1	92.9	95.7	97.9	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 400	51.1	92.9	95.7	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	51.1	92.9	95.7	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	51.1	92.9	95.7	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 100	51.1	92.9	95.7	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
0	51.1	92.9	95.7	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

141

NAVWEASERVCOM

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

RRP

CEILING VERSUS VISIBILITY

23223 ALAMEDA, CALIFORNIA 73-77 YEARS 554 MONTH 04 HOURS (P. T.)

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	28.4	48.2	51.8	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9
≥ 20000	30.5	53.2	56.7	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
≥ 18000	30.5	53.2	56.7	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
≥ 16000	30.5	53.2	56.7	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
≥ 14000	31.2	54.6	58.2	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3
≥ 12000	32.6	56.0	59.6	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
≥ 10000	33.3	56.7	60.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
≥ 9000	33.3	56.7	60.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
≥ 8000	34.0	58.2	61.7	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8
≥ 7000	34.8	59.6	63.1	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
≥ 6000	34.8	60.3	63.8	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
≥ 5000	35.5	63.1	66.7	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
≥ 4500	36.9	66.7	70.2	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 4000	36.9	67.4	70.9	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
≥ 3500	36.9	67.4	70.9	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
≥ 3000	39.0	70.9	74.5	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
≥ 2500	41.1	73.1	76.6	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 2000	43.3	76.6	80.1	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3
≥ 1800	43.3	77.3	80.9	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
≥ 1500	44.0	78.7	82.3	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
≥ 1200	44.0	78.7	83.7	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 1000	46.1	82.3	87.9	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
≥ 900	46.1	82.3	87.9	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
≥ 800	46.8	83.7	89.4	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 700	46.8	83.7	89.4	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 600	46.8	84.4	90.8	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 500	46.8	85.8	92.2	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 400	46.8	85.8	92.2	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 300	46.8	85.8	92.2	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 200	46.8	85.8	92.2	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 100	46.8	85.8	92.2	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
0	46.8	85.8	92.2	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0

TOTAL NUMBER OF OBSERVATIONS 141

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA

73-77

EEB

07

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	24.8	39.7	44.0	45.4	48.2	48.9	49.7	49.7	49.7	49.7	49.7	49.7	49.7	50.4
≥ 20000	27.7	44.7	48.9	50.4	53.2	53.9	54.6	54.6	54.6	54.6	54.6	54.6	54.6	55.3
18000	27.7	44.7	48.9	50.4	53.2	53.9	54.6	54.6	54.6	54.6	54.6	54.6	54.6	55.3
16000	27.7	44.7	48.9	50.4	53.2	53.9	54.6	54.6	54.6	54.6	54.6	54.6	54.6	55.3
14000	27.7	44.7	48.9	50.4	53.2	53.9	54.6	54.6	54.6	54.6	54.6	54.6	54.6	55.3
12000	27.7	44.7	48.9	50.4	53.2	53.9	54.6	54.6	54.6	54.6	54.6	54.6	54.6	55.3
10000	28.4	48.9	53.9	55.3	58.2	58.9	59.6	59.6	59.6	59.6	59.6	59.6	59.6	60.3
9000	28.4	48.9	53.9	55.3	58.2	58.9	59.6	59.6	59.6	59.6	59.6	59.6	59.6	60.3
8000	29.8	51.8	56.7	58.2	61.0	61.7	62.4	62.4	62.4	62.4	62.4	62.4	62.4	63.1
7000	30.5	53.2	58.2	59.6	62.4	63.1	63.8	63.8	63.8	63.8	63.8	63.8	63.8	64.5
6000	30.5	53.2	58.2	59.6	62.4	63.1	63.8	63.8	63.8	63.8	63.8	63.8	63.8	64.5
5000	30.5	53.2	58.2	59.6	62.4	63.1	63.8	63.8	63.8	63.8	63.8	63.8	63.8	64.5
4500	31.2	56.0	61.7	63.8	66.7	67.4	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.8
4000	31.9	57.5	63.1	65.3	68.1	68.8	69.5	69.5	69.5	69.5	69.5	69.5	69.5	70.2
3500	32.6	58.9	64.5	66.7	69.5	70.2	70.9	70.9	70.9	70.9	70.9	70.9	70.9	71.6
3000	32.6	61.7	68.1	70.2	73.1	73.8	74.5	74.5	74.5	74.5	74.5	74.5	74.5	75.2
2500	34.8	64.5	71.6	73.8	76.6	77.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.7
2000	34.8	66.0	73.1	75.2	78.0	78.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	80.1
1800	35.5	67.4	74.5	76.6	80.9	81.6	82.3	82.3	82.3	82.3	82.3	82.3	82.3	83.0
1500	36.9	69.5	76.6	80.1	83.7	84.4	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.8
1200	36.9	70.9	78.0	81.6	85.1	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	87.2
1000	36.9	70.9	78.0	81.6	85.1	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	87.2
900	36.9	70.9	78.0	81.6	85.1	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	87.2
800	36.9	70.9	78.0	81.6	85.1	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	87.2
700	36.9	71.6	78.7	82.3	86.5	87.2	87.9	87.9	87.9	87.9	87.9	87.9	87.9	88.7
600	36.9	72.3	79.4	83.0	87.2	87.9	88.7	88.7	88.7	88.7	88.7	88.7	88.7	89.4
500	36.9	72.3	79.4	83.0	87.2	87.9	88.7	88.7	88.7	88.7	88.7	88.7	88.7	89.4
400	36.9	72.3	79.4	83.0	87.2	87.9	88.7	88.7	88.7	88.7	88.7	88.7	88.7	89.4
300	36.9	72.3	79.4	83.0	87.2	87.9	88.7	88.7	88.7	88.7	88.7	88.7	88.7	89.4
200	36.9	72.3	79.4	83.0	87.2	87.9	88.7	88.7	88.7	88.7	88.7	88.7	88.7	89.4
100	36.9	72.3	79.4	83.0	87.2	87.9	88.7	88.7	88.7	88.7	88.7	88.7	88.7	89.4
0	36.9	72.3	79.4	83.0	87.2	87.9	88.7	88.7	88.7	88.7	88.7	88.7	88.7	89.4

TOTAL NUMBER OF OBSERVATIONS 141

CEILING VERSUS VISIBILITY

33229 ALAMEDA, CALIFORNIA

73-77

YEARS

5 FEB

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

10 HOURS (A.M. - P.M.)

3115

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 5/16	≥ 1/4	≥ 0
NO CEILING	22.7	36.9	41.1	42.6	44.7	48.2	48.9	48.9	48.9	49.7	49.7	49.7	49.7	50.4
≥ 20000	25.5	40.4	44.7	46.1	48.2	52.5	53.2	53.2	53.2	53.9	53.9	53.9	53.9	54.6
≥ 18000	25.5	40.4	44.7	46.1	48.2	52.5	53.2	53.2	53.2	53.9	53.9	53.9	53.9	54.6
≥ 16000	25.5	40.4	44.7	46.1	48.2	52.5	53.2	53.2	53.2	53.9	53.9	53.9	53.9	54.6
≥ 14000	26.2	41.1	46.1	47.5	49.7	53.9	54.6	54.6	54.6	55.3	55.3	55.3	55.3	56.0
≥ 12000	27.0	42.6	47.5	48.9	51.1	55.3	56.0	56.0	56.0	56.7	56.7	56.7	56.7	57.5
≥ 10000	27.0	43.3	48.2	49.7	51.8	56.0	56.7	56.7	56.7	57.5	57.5	57.5	57.5	58.2
≥ 9000	27.0	44.0	48.9	50.4	52.5	56.7	57.5	57.5	57.5	58.2	58.2	58.2	58.2	58.9
≥ 8000	28.4	46.1	51.1	52.5	54.6	58.9	59.6	59.6	59.6	60.3	60.3	60.3	60.3	61.0
≥ 7000	29.1	46.8	51.8	53.2	55.3	59.6	60.3	60.3	60.3	61.0	61.0	61.0	61.0	61.7
≥ 6000	29.1	46.8	51.8	53.2	55.3	59.6	60.3	60.3	60.3	61.0	61.0	61.0	61.0	61.7
≥ 5000	30.5	52.5	57.5	58.9	61.0	65.3	66.0	66.0	66.0	66.7	66.7	66.7	66.7	67.4
≥ 4500	30.5	52.5	57.5	58.9	61.0	65.3	66.0	66.0	66.0	66.7	66.7	66.7	66.7	67.4
≥ 4000	31.2	53.2	58.2	59.6	62.4	66.7	67.4	67.4	67.4	68.1	68.1	68.1	68.1	68.8
≥ 3500	33.3	56.7	61.7	63.1	66.0	70.2	70.9	70.9	70.9	71.6	71.6	71.6	71.6	72.3
≥ 3000	34.8	61.0	66.7	68.1	70.9	75.9	76.6	76.6	76.6	77.3	77.3	77.3	77.3	78.0
≥ 2500	36.9	64.9	70.2	71.6	74.5	79.4	80.1	80.1	80.1	80.9	80.9	80.9	80.9	81.6
≥ 2000	37.6	67.4	73.1	73.2	78.7	83.7	84.4	84.4	84.4	85.1	85.1	85.1	85.1	85.8
≥ 1800	37.6	68.1	73.8	73.9	79.4	84.4	85.1	85.1	85.1	85.8	85.8	85.8	85.8	86.5
≥ 1500	37.6	68.8	74.5	74.6	80.1	85.1	86.5	86.5	86.5	87.2	87.2	87.2	87.2	87.9
≥ 1200	38.3	70.9	76.6	78.7	82.3	87.2	89.4	89.4	89.4	90.1	90.1	90.1	90.1	90.8
≥ 1000	39.0	71.6	78.0	80.1	83.7	88.7	90.8	90.8	90.8	91.5	91.5	91.5	91.5	92.2
≥ 900	39.0	71.6	78.0	80.1	83.7	88.7	90.8	90.8	90.8	91.5	91.5	91.5	91.5	92.2
≥ 800	39.0	71.6	78.0	80.1	83.7	88.7	90.8	90.8	90.8	91.5	91.5	91.5	91.5	92.2
≥ 700	39.0	71.6	78.0	80.1	83.7	88.7	90.8	90.8	90.8	91.5	91.5	91.5	91.5	92.2
≥ 600	39.0	71.6	78.0	80.1	83.7	88.7	90.8	90.8	90.8	91.5	91.5	91.5	91.5	92.2
≥ 500	39.0	71.6	78.0	80.1	83.7	88.7	90.8	90.8	90.8	91.5	91.5	91.5	91.5	92.2
≥ 400	39.0	71.6	78.0	80.1	83.7	88.7	90.8	90.8	90.8	91.5	91.5	91.5	91.5	92.2
≥ 300	39.0	71.6	78.0	80.1	83.7	88.7	90.8	90.8	90.8	91.5	91.5	91.5	91.5	92.2
≥ 200	39.0	71.6	78.0	80.1	83.7	88.7	90.8	90.8	90.8	91.5	91.5	91.5	91.5	92.2
≥ 100	39.0	71.6	78.0	80.1	83.7	88.7	90.8	90.8	90.8	91.5	91.5	91.5	91.5	92.2
0	39.0	71.6	78.0	80.1	83.7	88.7	90.8	90.8	90.8	91.5	91.5	91.5	91.5	92.2

TOTAL NUMBER OF OBSERVATIONS

141

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA 73-77 FEB MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

12 HOURS (P. T. I.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 5	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2
NO CEILING	27.7	39.7	44.7	45.4	51.1	53.2	53.2	53.2	53.2	53.2	53.2	53.9
≥ 20000	30.5	44.0	48.9	50.4	57.5	59.6	60.3	60.3	60.3	60.3	60.3	61.0
18000	31.2	44.7	49.7	51.1	58.2	60.3	61.0	61.0	61.0	61.0	61.0	61.7
16000	31.2	44.7	49.7	51.1	58.2	60.3	61.0	61.0	61.0	61.0	61.0	61.7
14000	31.2	44.7	50.4	51.8	58.9	61.0	61.7	61.7	61.7	61.7	62.4	62.4
12000	31.2	45.4	51.8	53.2	61.0	63.1	63.8	63.8	63.8	63.8	64.5	64.5
10000	31.9	46.1	52.5	53.9	61.7	63.8	64.5	64.5	64.5	64.5	65.3	65.3
9000	31.9	46.8	53.2	54.6	62.4	64.5	65.3	65.3	65.3	65.3	66.0	66.0
8000	32.6	47.5	53.9	55.3	63.1	65.3	66.0	66.0	66.0	66.0	66.7	66.7
7000	32.6	47.5	53.9	55.3	63.1	65.3	66.0	66.0	66.0	66.0	66.7	66.7
6000	33.3	48.2	54.6	56.0	63.8	66.0	66.7	66.7	66.7	66.7	67.4	67.4
5000	34.8	51.8	58.2	59.6	67.4	69.5	70.2	70.2	70.2	70.2	70.9	70.9
4500	36.2	53.9	61.7	63.8	72.3	74.5	75.2	75.2	75.2	75.2	75.9	75.9
4000	36.2	55.3	63.8	66.0	75.2	77.3	78.0	78.0	78.0	78.0	78.7	78.7
3500	36.2	56.0	64.5	67.4	76.6	78.7	79.4	79.4	79.4	79.4	80.1	80.1
3000	39.0	62.4	70.9	73.8	83.0	85.1	85.8	85.8	85.8	85.8	86.5	86.5
2500	40.4	65.3	73.8	76.6	85.8	87.9	88.7	88.7	88.7	88.7	89.4	89.4
2000	41.8	68.1	77.3	80.1	89.4	91.5	92.2	92.2	92.2	92.2	92.9	92.9
1800	41.8	68.8	78.0	80.9	90.1	92.2	92.9	92.9	92.9	92.9	93.6	93.6
1500	41.8	69.5	78.7	81.6	90.8	93.6	94.3	94.3	94.3	94.3	95.0	95.0
1200	41.8	69.5	78.7	81.6	90.8	93.6	94.3	94.3	94.3	94.3	95.0	95.0
1000	41.8	70.9	80.1	83.7	92.9	95.7	96.5	96.5	96.5	96.5	97.2	97.2
900	41.8	70.9	80.1	83.7	93.6	96.5	97.2	97.2	97.2	97.2	97.9	97.9
800	41.8	70.9	80.1	83.7	93.6	96.5	97.9	97.9	97.9	97.9	98.6	98.6
700	41.8	70.9	80.9	84.4	94.3	97.2	98.6	98.6	98.6	98.6	99.3	99.3
600	41.8	70.9	80.9	84.4	94.3	97.2	98.6	98.6	98.6	98.6	99.3	99.3
500	41.8	70.9	80.9	84.4	94.3	97.2	98.6	98.6	98.6	98.6	99.3	99.3
400	41.8	70.9	80.9	84.4	94.3	97.2	98.6	98.6	98.6	98.6	99.3	99.3
300	41.8	70.9	80.9	84.4	94.3	97.2	98.6	98.6	98.6	98.6	99.3	99.3
200	41.8	70.9	80.9	84.4	94.3	97.2	98.6	98.6	98.6	98.6	99.3	99.3
100	41.8	70.9	80.9	84.4	94.3	97.2	98.6	98.6	98.6	98.6	99.3	99.3
0	41.8	70.9	80.9	84.4	94.3	97.2	98.6	98.6	98.6	98.6	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS 141

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA

73-77

YEARS

558 MONTHS

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURLY (A. T. T.)

3113

FORM

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

FORM

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	28.4	42.6	46.1	46.8	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
20000	33.3	53.9	57.5	58.9	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
18000	33.3	53.9	57.5	58.9	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
16000	33.3	54.6	58.2	59.6	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
14000	35.5	56.7	61.0	62.4	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
12000	36.2	58.2	62.4	63.8	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
10000	38.3	61.0	65.3	66.7	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
9000	39.0	62.4	66.7	68.1	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
8000	39.7	63.1	68.1	69.5	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
7000	39.7	63.8	68.8	70.2	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
6000	40.4	64.5	69.5	70.9	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
5000	41.1	66.7	71.6	73.1	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
4500	41.8	68.8	73.8	75.2	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
4000	41.8	69.5	75.2	76.6	79.4	80.1	80.1	80.1	80.1	80.1	80.1	80.1
3500	41.8	70.2	75.9	77.3	80.1	80.9	80.9	80.9	80.9	80.9	80.9	80.9
3000	44.7	73.1	78.7	80.9	83.7	83.7	84.4	84.4	84.4	84.4	84.4	84.4
2500	45.4	74.5	80.1	83.7	86.5	86.5	87.2	87.2	87.2	87.2	87.2	87.2
2000	46.1	75.9	82.3	85.8	88.7	89.4	90.1	90.1	90.1	90.1	90.1	90.1
1800	46.8	77.3	83.7	87.2	90.8	91.5	92.2	92.2	92.2	92.2	92.2	92.2
1500	46.8	80.1	86.5	90.1	93.6	94.3	95.0	95.0	95.0	95.0	95.0	95.0
1200	46.8	80.1	86.5	90.1	93.6	94.3	95.0	95.0	95.0	95.0	95.0	95.0
1000	46.8	81.6	88.7	92.9	96.5	97.2	97.9	97.9	97.9	97.9	97.9	97.9
900	46.8	81.6	88.7	92.9	96.5	97.2	97.9	97.9	97.9	97.9	97.9	97.9
800	46.8	81.6	88.7	92.9	96.5	97.2	97.9	97.9	97.9	97.9	97.9	97.9
700	46.8	81.6	88.7	93.6	97.2	97.9	98.6	98.6	98.6	98.6	98.6	98.6
600	46.8	81.6	88.7	93.6	97.2	97.9	98.6	98.6	98.6	98.6	98.6	98.6
500	46.8	81.6	88.7	93.6	97.2	97.9	98.6	98.6	98.6	98.6	98.6	98.6
400	46.8	81.6	88.7	93.6	97.2	97.9	98.6	98.6	98.6	98.6	98.6	98.6
300	46.8	81.6	88.7	93.6	97.2	97.9	98.6	98.6	98.6	98.6	98.6	98.6
200	46.8	81.6	88.7	93.6	97.2	97.9	98.6	98.6	98.6	98.6	98.6	98.6
100	46.8	81.6	88.7	93.6	97.2	97.9	98.6	98.6	98.6	98.6	98.6	98.6
0	46.8	81.6	88.7	93.6	97.2	97.9	98.6	98.6	98.6	98.6	98.6	98.6

TOTAL NUMBER OF OBSERVATIONS

141

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239

ALAMEDA, CALIFORNIA

73-77

YEARS

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

19

HOURS (C.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	26.2	46.9	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1
AI 20000	35.5	62.4	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
AI 18000	35.5	63.1	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
AI 16000	36.2	63.8	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
AI 14000	36.2	64.5	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
AI 12000	36.9	66.0	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
AI 10000	38.3	68.1	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
AI 9000	38.3	68.8	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
AI 8000	40.4	71.6	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
AI 7000	41.1	72.3	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
AI 6000	41.1	72.3	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
AI 5000	41.8	73.8	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
AI 4500	42.6	76.6	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
AI 4000	42.6	77.3	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
AI 3500	44.0	79.4	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3
AI 3000	45.4	80.9	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
AI 2500	48.2	84.4	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
AI 2000	49.7	87.9	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
AI 1800	49.7	87.9	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
AI 1500	49.7	90.8	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
AI 1200	49.7	90.8	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
AI 1000	49.7	91.5	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
AI 900	49.7	92.2	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
AI 800	49.7	92.2	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
AI 700	49.7	92.2	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
AI 600	49.7	92.9	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
AI 500	49.7	92.9	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
AI 400	49.7	92.9	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
AI 300	49.7	92.9	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
AI 200	49.7	92.9	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
AI 100	49.7	92.9	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
AI 0	49.7	92.9	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2

TOTAL NUMBER OF OBSERVATIONS 141

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

22229 ALAMEDA, CALIFORNIA 73-77 YEARS FEB 1968

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

22
HOURS (P. T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	38.3	56.0	57.5	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
≥ 20000	42.6	63.8	66.7	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
18000	43.3	64.5	67.4	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
16000	43.3	64.5	67.4	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
14000	44.7	66.0	68.8	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
12000	46.1	68.1	70.9	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
10000	46.1	68.8	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
9000	46.1	70.2	73.1	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
8000	46.8	70.9	73.8	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
7000	48.9	73.8	76.6	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
6000	49.7	74.5	77.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
5000	50.4	75.9	78.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
4500	50.4	76.7	81.6	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3
4000	50.4	79.4	82.3	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
3500	51.1	80.1	83.0	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
3000	51.1	80.9	84.4	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
2500	51.8	81.6	85.1	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
2000	54.6	85.8	90.1	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
1800	54.6	87.2	91.5	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
1500	54.6	87.9	92.2	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
1200	54.6	89.4	93.6	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
1000	54.6	90.8	95.0	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
900	54.6	90.8	95.0	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
800	54.6	90.8	95.0	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
700	54.6	91.5	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
600	54.6	91.5	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
500	54.6	92.9	97.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
400	54.6	92.9	97.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	54.6	92.9	97.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	54.6	92.9	97.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	54.6	92.9	97.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	54.6	92.9	97.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 141

CEILING VERSUS VISIBILITY

23229

ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

550

ALL

HOURLY

CEILING (FEET)	VISIBILITY (STATUTE MILES)															≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	
NO CEILING	28.6	45.9	49.0	49.9	51.6	52.3	52.6	52.6	52.6	52.7	52.7	52.7	52.8	52.8	53.1	
≥ 20000	32.6	53.0	56.5	57.5	59.4	60.3	60.6	60.6	60.6	60.6	60.6	60.6	60.7	60.7	61.1	
AI 18000	32.8	53.3	56.7	57.8	59.7	60.6	60.8	60.8	60.8	60.9	60.9	60.9	61.0	61.0	61.4	
AI 16000	32.9	53.5	56.9	58.0	59.8	60.7	61.0	61.0	61.0	61.1	61.1	61.1	61.2	61.2	61.5	
AI 14000	33.5	54.3	58.1	59.1	61.0	61.9	62.2	62.2	62.2	62.2	62.2	62.2	62.3	62.4	62.7	
AI 12000	34.4	55.9	59.7	60.7	62.7	63.6	63.8	63.8	63.8	63.9	63.9	63.9	64.0	64.1	64.4	
AI 10000	35.0	57.1	61.0	62.1	64.0	64.9	65.2	65.2	65.2	65.3	65.3	65.3	65.3	65.4	65.7	
AI 9000	35.1	57.8	61.7	62.8	64.7	65.6	65.9	65.9	65.9	66.0	66.0	66.0	66.1	66.1	66.4	
AI 8000	36.1	59.3	63.3	64.5	66.4	67.3	67.6	67.6	67.6	67.6	67.6	67.6	67.7	67.7	68.1	
AI 7000	37.2	60.8	64.8	66.0	67.9	68.8	69.1	69.1	69.1	69.2	69.2	69.2	69.2	69.3	69.6	
AI 6000	37.6	61.4	65.3	66.5	68.4	69.3	69.6	69.6	69.6	69.7	69.7	69.7	69.8	69.9	70.1	
AI 5000	38.5	63.8	67.8	69.0	70.9	71.8	72.1	72.1	72.1	72.2	72.2	72.2	72.3	72.3	72.6	
AI 4500	39.1	66.0	70.2	71.5	73.7	74.6	74.8	74.8	74.8	74.9	74.9	74.9	75.0	75.1	75.4	
AI 4000	39.3	66.9	71.4	72.7	74.9	75.8	76.2	76.2	76.2	76.2	76.2	76.2	76.3	76.4	76.7	
AI 3500	40.1	68.3	72.7	74.1	76.3	77.2	77.6	77.6	77.6	77.7	77.7	77.7	77.8	77.8	78.1	
AI 3000	41.7	71.5	76.2	77.7	80.0	80.9	81.3	81.3	81.3	81.4	81.4	81.4	81.5	81.6	81.8	
AI 2500	43.3	73.7	78.5	80.1	82.5	83.4	83.8	83.8	83.8	83.9	83.9	83.9	84.0	84.0	84.3	
AI 2000	44.4	76.3	81.6	83.3	85.7	86.8	87.2	87.2	87.2	87.2	87.2	87.2	87.3	87.4	87.7	
AI 1800	44.9	77.4	82.5	84.4	86.9	87.9	88.3	88.3	88.3	88.4	88.4	88.4	88.5	88.6	88.8	
AI 1500	45.2	79.1	84.2	86.4	89.0	90.2	90.6	90.6	90.6	90.7	90.7	90.7	90.8	90.9	91.1	
AI 1200	45.4	79.8	85.1	87.2	89.9	91.1	91.6	91.6	91.6	91.7	91.7	91.7	91.8	91.8	92.1	
AI 1000	45.7	80.9	86.6	89.0	91.7	92.9	93.4	93.4	93.4	93.5	93.5	93.5	93.6	93.7	94.0	
AI 900	45.7	81.0	86.7	89.1	91.8	93.1	93.6	93.6	93.6	93.7	93.7	93.7	93.8	93.9	94.2	
AI 800	45.8	81.3	87.2	89.5	92.4	93.6	94.2	94.3	94.3	94.4	94.4	94.4	94.5	94.6	94.9	
AI 700	45.8	81.7	87.7	90.3	93.1	94.3	95.0	95.0	95.0	95.1	95.1	95.1	95.2	95.3	95.6	
AI 600	45.8	82.2	88.3	90.9	93.7	95.0	95.7	95.8	95.8	95.9	95.9	95.9	96.0	96.1	96.4	
AI 500	45.8	82.6	88.6	91.5	94.5	95.8	96.5	96.7	96.7	97.0	97.1	97.1	97.2	97.3	97.5	
AI 400	45.8	82.6	88.8	91.7	94.9	96.3	97.2	97.6	97.6	97.9	98.0	98.1	98.1	98.1	98.4	
AI 300	45.8	82.6	88.8	91.8	95.0	96.4	97.3	97.9	97.9	98.1	98.2	98.3	98.3	98.4	98.7	
AI 200	45.8	82.6	88.8	91.8	95.0	96.5	97.4	98.0	98.0	98.4	98.5	98.6	98.6	98.6	99.0	
AI 100	45.8	82.6	88.8	91.8	95.0	96.5	97.4	98.0	98.0	98.6	98.7	98.7	98.8	98.8	99.4	
AI 0	45.8	82.6	88.8	91.8	95.0	96.5	97.4	98.0	98.0	98.6	98.7	98.7	98.8	98.8	99.0	

1128

TOTAL NUMBER OF OBSERVATIONS

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA

73-77

YEARS

MAR
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

NO. OF
HOURS (P. T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	41.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 20000	45.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
18000	45.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
16000	45.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
14000	47.1	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
12000	49.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
10000	51.0	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
9000	51.0	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
8000	52.3	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
7000	52.3	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
6000	52.3	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
5000	52.3	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
4500	53.6	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
4000	53.6	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
3500	54.2	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
3000	55.5	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
2500	57.4	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
2000	60.0	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
1800	60.7	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
1500	61.0	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
1200	63.2	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
1000	63.9	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
900	63.9	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
800	63.9	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
700	64.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
600	64.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
500	64.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
400	64.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
300	64.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
200	64.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
100	64.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
0	64.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

135

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA 73-77 YEARS MAR MONTH 04 HOURS (G.S.T.)

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16	≥ ¼
NO CEILING	41.3	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 20000	42.6	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
18000	42.6	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
16000	43.2	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
14000	45.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
12000	46.5	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
10000	47.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
9000	48.4	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
8000	48.4	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
7000	48.4	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
6000	49.0	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
5000	50.3	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
4500	52.3	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
4000	52.3	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
3500	52.3	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
3000	52.9	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
2500	54.8	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
2000	56.8	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
1800	58.7	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
1500	60.7	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
1200	61.3	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
1000	62.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
900	63.2	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
800	63.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
700	63.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
600	63.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
500	63.2	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
400	63.2	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
300	63.2	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
200	63.2	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
100	63.2	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
0	63.2	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1

TOTAL NUMBER OF OBSERVATIONS 155

AD-A060 998

NAVAL WEATHER SERVICE DETACHMENT / SHEVILLE N C
SUMMARY OF METEOROLOGICAL OBSERVATIONS, SURFACE (SMOS), ALAMEDA--ETC(U)
JUN 78

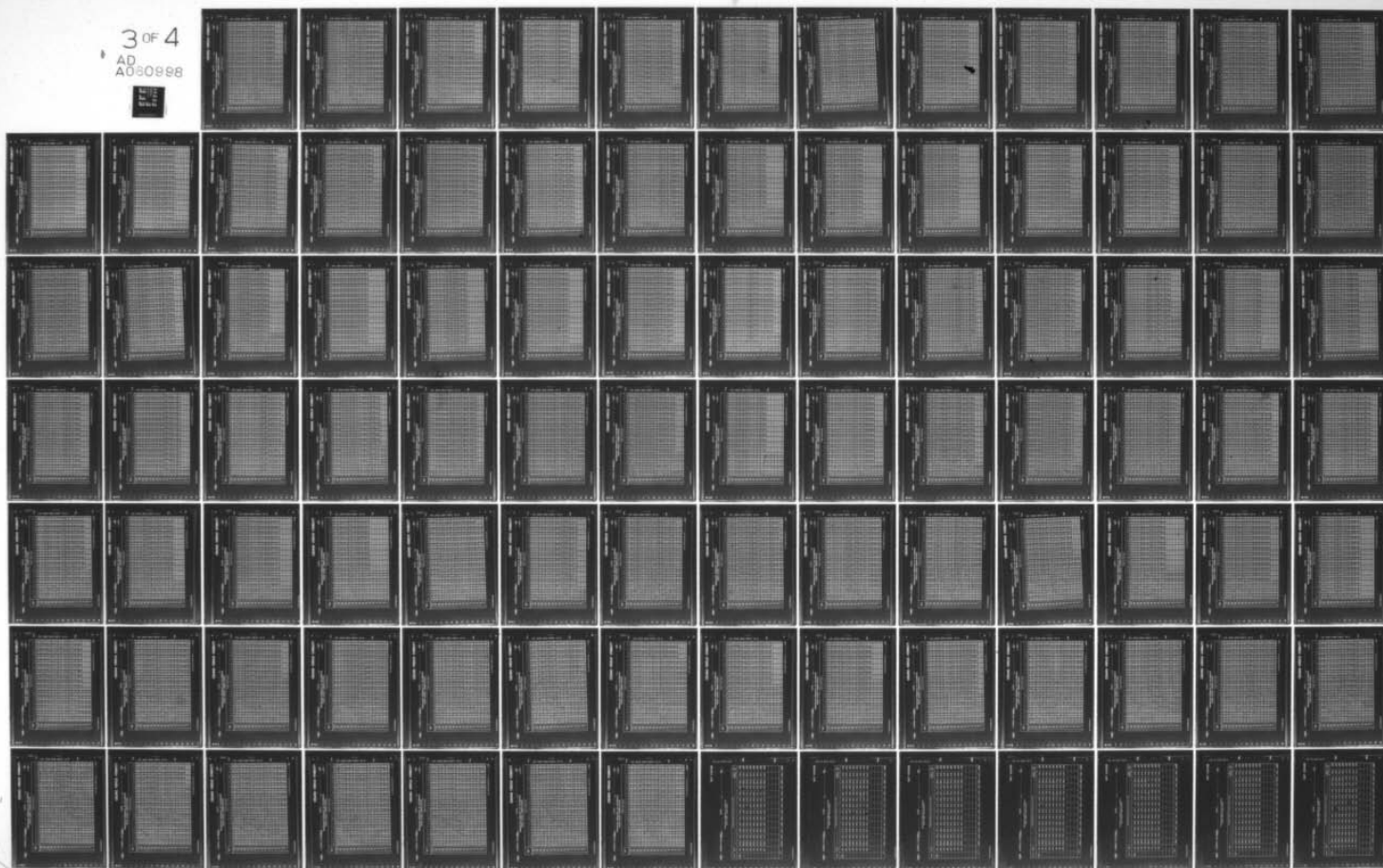
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3 OF 4

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CEILING VERSUS VISIBILITY

23229

ALAMEDA, CALIFORNIA

73-77

1973

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

07
HOURS (L.T.)

07
HOURS (L.T.)

1234-18766

5703

CEILING VERSUS VISIBILITY

JAN 68

155

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	34.2	45.2	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
≥ 20000	34.8	46.5	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
18000	34.8	46.5	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
16000	35.5	47.1	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
14000	36.1	47.7	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
12000	36.1	49.0	50.3	50.3	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
10000	38.7	53.6	54.8	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
9000	38.7	53.6	54.8	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
8000	38.7	53.6	54.8	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
7000	40.0	54.8	56.1	56.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
6000	40.0	55.5	56.8	57.4	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
5000	41.3	57.4	58.7	59.4	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
4500	42.6	61.9	63.9	64.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
4000	42.6	61.9	63.9	64.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
3500	42.6	63.2	65.8	66.5	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
3000	43.9	68.4	71.0	71.6	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
2500	46.5	71.6	74.8	75.5	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
2000	48.4	77.4	81.3	82.6	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
1800	49.0	78.1	81.9	83.2	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
1500	51.0	84.5	88.4	90.3	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
1200	51.0	86.5	90.3	92.3	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
1000	51.6	87.7	91.6	93.6	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
900	51.6	88.4	92.3	94.2	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
800	51.6	89.0	92.9	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
700	51.6	89.0	92.9	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
600	51.6	89.0	92.9	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
500	51.6	89.0	92.9	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
400	51.6	89.0	92.9	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
300	51.6	89.0	92.9	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
200	51.6	89.0	92.9	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
100	51.6	89.0	92.9	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
0	51.6	89.0	92.9	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

23239

ALAMEDA, CALIFORNIA

73-77

YEAR

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MAR

MONTH

10

HOURS (G.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	36.1	52.9	53.6	53.6	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 20000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
18000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
16000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
14000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
12000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
10000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
8000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
6000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
4000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
3000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
2000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
1800	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
1600	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
1400	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
1200	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
1000	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
900	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
800	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
700	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
600	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
500	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
400	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
300	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
200	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
100	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
0	40.0	60.0	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA

73-77

YEARS

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

12
HOURS (P. Y.)

3105

RRRR

5703 CEILING VERSUS VISIBILITY JAN 68

1234-18766

RRR

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	42.6	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 20000	47.1	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
18000	47.1	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
16000	47.1	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
14000	47.7	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
12000	47.7	66.5	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
10000	51.0	71.0	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
9000	51.0	71.0	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
8000	51.0	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
7000	51.0	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
6000	51.0	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
5000	52.3	74.2	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
4500	54.2	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
4000	55.5	78.1	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
3500	57.4	81.9	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
3000	60.7	85.2	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
2500	62.6	87.7	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
2000	63.2	92.3	93.6	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
1800	63.2	92.3	93.6	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
1500	63.2	93.6	95.5	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
1200	63.2	94.2	96.1	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
1000	63.2	95.5	97.4	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
900	63.2	95.5	97.4	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
800	63.2	95.5	97.4	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
700	63.2	95.5	97.4	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
600	63.2	95.5	97.4	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
500	63.2	95.5	97.4	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
400	63.2	95.5	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
300	63.2	95.5	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
200	63.2	95.5	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
100	63.2	95.5	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
0	63.2	95.5	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

153

CEILING VERSUS VISIBILITY

83229

ALAMEDA, CALIFORNIA

73-77

YEARS

MAR

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURS (P. T.)

1A

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 0
NO CEILING	47.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 20000	52.9	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
≥ 18000	53.6	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 16000	53.6	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 14000	54.8	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 12000	54.8	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 10000	56.1	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 9000	56.1	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 8000	57.4	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 7000	58.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 6000	58.7	77.4	77.4	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 5000	59.4	78.1	78.1	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 4500	61.9	81.9	81.9	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
≥ 4000	62.6	82.6	82.6	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 3500	65.2	85.8	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 3000	65.8	86.4	86.4	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
≥ 2500	68.4	91.0	91.0	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 2000	68.4	92.3	92.3	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1800	68.4	92.3	92.3	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1500	68.4	94.8	94.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 1200	68.4	94.8	94.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 1000	68.4	94.8	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 900	68.4	94.8	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	68.4	94.8	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	68.4	94.8	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	68.4	94.8	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 500	68.4	94.8	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 400	68.4	94.8	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	68.4	94.8	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	68.4	94.8	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	68.4	94.8	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
0	68.4	94.8	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

153

NAVWEASERVCOM

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEAR

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

19
HOURS (75% T.)

3103

5703

CEILING VERSUS VISIBILITY JAN 68

1234-18766

000

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾
NO CEILING	45.2	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 20000	49.7	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
18000	49.7	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
16000	49.7	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
14000	51.6	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
12000	52.9	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
10000	54.8	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
9000	55.5	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
8000	58.1	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
7000	58.1	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
6000	58.1	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
5000	60.0	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
4500	60.0	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
4000	60.0	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
3500	60.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
3000	62.6	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
2500	63.2	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
2000	64.5	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
1800	64.5	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
1500	64.5	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
1200	64.5	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
1000	65.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
900	65.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
800	65.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
700	65.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
600	65.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
500	65.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
400	65.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
300	65.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
200	65.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
100	65.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
0	65.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23229

ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MAR

22
HOURS (P. T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	48.4	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 20000	52.3	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
18000	52.3	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
16000	52.3	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
14000	54.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
12000	55.5	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
10000	58.1	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
9000	58.1	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
8000	58.7	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
7000	59.4	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
6000	60.0	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
5000	60.7	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
4500	61.3	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
4000	61.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
3500	61.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
3000	62.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
2500	62.6	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
2000	63.9	88.4	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
1800	63.9	89.7	89.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
1600	63.9	91.6	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
1200	64.5	92.9	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
1000	65.2	95.5	96.1	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
900	65.2	96.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
800	65.2	96.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
700	65.2	96.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
600	65.2	96.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
500	65.2	96.8	97.4	98.7	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0
400	65.2	96.8	97.4	98.7	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0
300	65.2	96.8	97.4	98.7	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0
200	65.2	96.8	97.4	98.7	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0
100	65.2	96.8	97.4	98.7	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0
0	65.2	96.8	97.4	98.7	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	42.1	54.6	54.8	54.8	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9
≥ 20000	45.7	59.4	59.7	59.7	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8
18000	45.7	59.5	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8
16000	45.9	59.8	60.0	60.0	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1
14000	47.2	61.6	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
12000	47.8	62.6	62.9	62.9	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1
10000	49.9	66.0	66.3	66.5	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6
9000	50.1	66.1	66.5	66.6	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8
8000	50.9	67.5	67.8	68.0	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
7000	51.2	67.9	68.2	68.4	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
6000	51.5	68.4	68.7	69.0	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1
5000	52.5	70.4	71.0	71.2	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
4500	53.8	73.0	73.5	73.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
4000	54.1	73.5	74.0	74.3	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
3500	54.9	75.4	76.1	76.3	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
3000	56.4	78.9	79.6	80.0	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2
2500	58.2	82.3	83.1	83.6	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
2000	59.5	86.4	87.3	88.1	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
1800	60.0	87.3	88.3	89.0	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
1500	60.7	90.4	91.5	92.5	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
1200	61.1	91.9	93.1	94.2	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
1000	61.8	93.5	94.7	95.9	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
900	61.6	94.0	95.2	96.5	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
800	61.4	94.4	95.6	96.9	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
700	61.7	94.6	95.8	97.3	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
600	61.7	94.8	96.0	97.4	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
500	61.7	94.9	96.1	97.7	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
400	61.7	95.0	96.4	98.2	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
300	61.7	95.0	96.5	98.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
200	61.7	95.0	96.5	98.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
100	61.7	95.0	96.5	98.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
0	61.7	95.0	96.5	98.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2

TOTAL NUMBER OF OBSERVATIONS

1240

NAVWEASERVCOM

3101

NNNN

5703 CEILING VERSUS VISIBILITY JAN 68

NNNN

1234-18766

ALAMEDA, CALIFORNIA

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)		VISIBILITY (STATUTE MILES)														
		≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING		55.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
AI 20000		57.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
AI 18000		57.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
AI 16000		57.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
AI 14000		57.3	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
AI 12000		58.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
AI 10000		58.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
AI 9000		58.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
AI 8000		60.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
AI 7000		60.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
AI 6000		60.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
AI 5000		60.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
AI 4500		61.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
AI 4000		62.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
AI 3500		65.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
AI 3000		66.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
AI 2500		66.0	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
AI 2000		67.3	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
AI 1800		67.3	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
AI 1500		68.7	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
AI 1200		70.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
AI 1000		71.3	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
AI 900		72.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
AI 800		72.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
AI 700		72.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
AI 600		72.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 500		72.0	98.0	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 400		72.0	98.0	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 300		72.0	98.0	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 200		72.0	98.0	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 100		72.0	98.0	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 0		72.0	98.0	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

APR NORTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MOON (S. T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	48.0	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
≥ 20000	49.3	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
18000	50.0	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
16000	50.0	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
14000	50.0	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
12000	50.0	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
10000	51.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
9000	51.3	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
8000	51.3	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
7000	52.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
6000	52.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
5000	52.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
4500	52.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
4000	54.7	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
3500	54.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
3000	56.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
2500	57.3	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
2000	60.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
1800	60.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
1500	63.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
1200	64.7	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
1000	65.3	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
900	66.0	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
800	66.0	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
700	66.0	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
600	66.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
500	66.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
400	66.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
300	66.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
200	66.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
100	66.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	66.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

150

NAVWEASERVCOM

3099

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

NHP

CEILING VERSUS VISIBILITY

33239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

APR
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

07
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	45.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 20000	47.3	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 18000	48.0	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
≥ 16000	48.0	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
≥ 14000	48.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 12000	49.3	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
≥ 10000	49.3	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 9000	50.0	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 8000	52.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
≥ 7000	52.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
≥ 6000	52.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
≥ 5000	52.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 4500	54.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 4000	54.7	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
≥ 3500	56.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
≥ 3000	56.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 2500	58.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 2000	58.7	81.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 1800	58.7	81.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 1500	60.0	84.7	85.3	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 1200	60.0	86.0	86.7	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 1000	60.0	92.0	92.7	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 900	60.0	93.3	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 800	60.0	94.0	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 700	60.0	95.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 600	60.0	95.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 500	60.0	96.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	60.0	96.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	60.0	96.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	60.0	96.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 100	60.0	96.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
0	60.0	96.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

150

NAVWEASERVCOM

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

APR MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18 HOURS (A.T.)

3097

NNNN

5703 CEILING VERSUS VISIBILITY JAN 68

1234-18766

NNN

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	46.0	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 20000	48.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
18000	48.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
16000	49.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
14000	50.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
12000	50.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
10000	51.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 9000	51.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
8000	52.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
7000	52.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
6000	52.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
5000	53.3	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
4500	54.7	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
4000	55.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
3500	56.7	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
3000	58.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
2500	59.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
2000	62.0	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
1800	62.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
1500	63.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
1200	64.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
1000	64.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
900	64.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
800	64.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
700	64.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
600	64.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
500	64.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
400	64.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
300	64.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
200	64.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
100	64.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	64.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

150

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

22229 ALAMEDA, CALIFORNIA STATION NAME 73-77 YEARS APR MONTH 12 HOURS (L. S. T.)
 PERCENTAGE FREQUENCY OF OCCURRENCE
 (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	58.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
≥ 20000	64.0	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
18000	65.3	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
16000	65.3	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
14000	66.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
12000	66.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
10000	66.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
9000	67.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
8000	68.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
7000	68.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
6000	68.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
5000	69.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
4500	70.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
4000	72.0	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
3500	72.7	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
3000	74.0	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
2500	74.7	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
2000	75.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
1800	76.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
1500	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
1200	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
1000	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
900	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
800	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
700	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
600	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
500	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
400	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
300	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
200	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
100	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	76.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS 150

CEILING VERSUS VISIBILITY

3-2-2-2-9

ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

APR

16 HOURS (P. T. I.)

3095

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

111

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	59.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
≥ 20000	64.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
18000	64.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
16000	64.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
14000	65.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
12000	66.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
10000	67.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
9000	67.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
8000	67.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
7000	68.0	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
6000	69.0	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
5000	68.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
4500	70.0	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
4000	71.3	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
3500	71.3	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
3000	72.7	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
2500	75.3	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
2000	76.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
1800	76.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
1500	76.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
1200	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
1000	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
900	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
800	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
700	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
600	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
500	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
400	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
300	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
200	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
100	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
0	76.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

150

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

APR
MONTH

YEARS

73-77

ALAMEDA, CALIFORNIA

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

10
HOURS (U.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	54.7	74.0	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
≥ 20000	57.3	79.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
18000	57.3	79.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
16000	57.3	79.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
14000	57.3	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
12000	58.0	81.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
10000	58.7	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
9000	58.7	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
8000	58.7	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
7000	59.3	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
6000	59.3	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
5000	59.3	84.0	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
4500	60.0	84.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
4000	60.7	85.3	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
3500	61.3	86.0	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
3000	62.0	86.7	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
2500	62.7	87.3	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
2000	63.3	88.0	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
1800	64.0	88.7	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
1500	64.7	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
1200	65.3	90.0	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
1000	66.0	90.7	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
900	66.7	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
800	67.3	92.0	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
700	68.0	92.7	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
600	68.7	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
500	69.3	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
400	70.0	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
300	70.7	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
200	71.3	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
100	72.0	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
0	72.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0

TOTAL NUMBER OF OBSERVATIONS

150

CEILING VERSUS VISIBILITY

APR 1977

YEARS

73-77

ALAMEDA, CALIFORNIA

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MOON

22

HOURLY

22

73-77

ALAMEDA, CALIFORNIA

APR 1977

YEARS

73-77

ALAMEDA, CALIFORNIA

APR 1977

YEARS

73-77

ALAMEDA, CALIFORNIA

APR 1977

YEARS

73-77

ALAMEDA, CALIFORNIA

APR 1977

YEARS

73-77

ALAMEDA, CALIFORNIA

APR 1977

YEARS

73-77

ALAMEDA, CALIFORNIA

APR 1977

YEARS

73-77

ALAMEDA, CALIFORNIA

APR 1977

YEARS

73-77

ALAMEDA, CALIFORNIA

APR 1977

YEARS

73-77

ALAMEDA, CALIFORNIA

APR 1977

YEARS

73-77

CEILING (FEET)	VISIBILITY (STATUTE MILES)														TOTAL
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	60.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 20000	62.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 18000	62.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 16000	62.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 14000	62.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
≥ 12000	63.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 10000	63.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 9000	63.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 8000	63.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 7000	65.3	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 6000	65.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 5000	66.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 4500	66.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
≥ 4000	66.7	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 3500	66.7	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 3000	68.0	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
≥ 2500	68.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 2000	70.0	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
≥ 1800	70.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 1500	70.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 1200	72.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 1000	72.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 900	72.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 800	72.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 700	72.7	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 600	72.7	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 500	72.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	72.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	72.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	72.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	72.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	72.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS 150

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

APR MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL HOURS (24 HRS.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	53.4	68.8	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
≥ 20000	56.3	73.0	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
18000	56.6	73.3	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4
16000	56.8	73.5	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
14000	57.2	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
12000	57.8	75.4	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
10000	58.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
9000	58.5	76.4	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
8000	59.5	77.5	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
7000	59.7	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
6000	59.8	77.9	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
5000	60.3	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
4500	61.5	80.2	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3
4000	62.2	81.5	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
3500	63.3	82.9	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1
3000	64.3	84.5	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
2500	65.2	85.9	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
2000	67.1	89.9	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2
1800	67.3	90.8	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
1500	68.4	93.0	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
1200	69.2	94.5	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
1000	69.4	96.0	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
900	69.7	96.8	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
800	69.7	97.2	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
700	69.7	97.8	98.4	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
600	69.7	98.0	98.7	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
500	69.7	98.1	98.8	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
400	69.7	98.3	99.0	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
300	69.7	98.3	99.0	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
200	69.7	98.3	99.0	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
100	69.7	98.3	99.0	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
0	69.7	98.3	99.0	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7

TOTAL NUMBER OF OBSERVATIONS

1200

NAVWEASERVCOM

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

MRP

3091

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

MM

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

01
HOURS (P.M. T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	57.8	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
≥ 20000	60.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
18000	60.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
16000	60.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
14000	60.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
12000	61.0	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1
10000	61.0	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1
9000	61.0	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1
8000	61.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
7000	61.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
6000	61.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
5000	61.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
4500	62.3	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4
4000	62.3	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4
3500	62.3	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4
3000	62.3	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4
2500	63.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
2000	64.9	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
1800	65.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
1500	66.9	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2
1200	70.8	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
1000	71.4	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
900	72.1	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
800	72.7	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
700	74.0	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
600	74.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
500	74.0	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
400	74.0	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
300	74.0	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
200	74.0	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
100	74.0	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
0	74.0	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

154

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23220 ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MAY

04
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	47.1	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
20000	49.7	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
18000	49.7	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
16000	49.7	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
14000	49.7	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
12000	51.0	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
10000	51.6	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
9000	51.6	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
8000	51.6	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
7000	51.6	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
6000	51.6	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
5000	51.6	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
4500	52.3	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
4000	52.9	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
3500	52.9	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
3000	52.9	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
2500	54.2	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
2000	55.5	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
1800	56.1	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
1500	58.7	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
1200	64.5	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
1000	67.1	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
900	67.7	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
800	67.7	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
700	69.0	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
600	69.7	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
500	69.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
400	69.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	69.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	69.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	69.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	69.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

28829

ALAMEDA, CALIFORNIA

73-77

YEAR

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

07
HOURS (G.T.)

3089

MM

5703 CEILING VERSUS VISIBILITY JAN 68

1234-18766

MM

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ½
NO CEILING	41.3	57.4	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
AI 20000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 18000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 16000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 14000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 12000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 10000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 9000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 8000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 7000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 6000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 5000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 4500	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 4000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 3500	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 3000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 2500	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 2000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 1800	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 1500	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 1200	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 1000	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 900	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 800	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 700	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 600	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 500	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 400	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 300	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 200	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
AI 100	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
0	43.2	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA 73-77 YEARS MAY 1968
 PERCENTAGE FREQUENCY OF OCCURRENCE
 (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½
NO CEILING	58.1	74.2	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 20000	61.9	78.1	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
AI AI 18000	61.9	78.1	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
AI AI 16000	61.9	78.1	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
AI 14000	62.6	78.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
AI 12000	62.6	79.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
AI 10000	62.6	79.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
AI AI 9000	62.6	79.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
AI AI 8000	63.9	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
AI AI 7000	63.9	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
AI AI 6000	64.5	81.3	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
AI AI 5000	65.2	81.9	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
AI AI 4500	65.2	81.9	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
AI AI 4000	65.2	81.9	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
AI AI 3500	65.2	81.9	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
AI AI 3000	67.1	83.9	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
AI AI 2500	67.7	85.2	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
AI AI 2000	70.3	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
AI AI 1800	70.3	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
AI AI 1500	71.0	92.9	93.6	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2
AI AI 1200	71.0	95.5	96.1	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8
AI AI 1000	71.0	96.1	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1
AI AI 900	71.0	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI AI 800	71.0	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI AI 700	71.0	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI AI 600	71.0	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI AI 500	71.0	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI AI 400	71.0	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI AI 300	71.0	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI AI 200	71.0	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI AI 100	71.0	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI AI 0	71.0	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

23220 ALAMEDA, CALIFORNIA

73-77

YEARS

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

NO. OF
HOURS

3087

NNNN

5703 CEILING VERSUS VISIBILITY JAN 68

1234-18766

NNNN

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	69.7	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 20000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 18000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 16000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 14000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 12000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 10000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 9000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 8000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 7000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 6000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 5000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 4500	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 4000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 3500	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 3000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 2500	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 2000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 1800	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 1500	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 1200	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 1000	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 900	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 800	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 700	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 600	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 500	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 400	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 300	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 200	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 100	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 0	71.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23229

ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MAY

16

HOURS (P. M.)

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

MAY

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	65.8	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
AI 20000	72.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
AI 18000	72.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
AI 16000	72.9	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
AI 14000	72.9	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
AI 12000	72.9	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
AI 10000	73.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
AI 9000	74.2	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
AI 8000	75.5	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
AI 7000	75.5	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
AI 6000	75.5	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
AI 5000	75.5	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
AI 4500	76.1	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
AI 4000	76.1	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
AI 3500	76.1	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
AI 3000	76.1	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
AI 2500	76.8	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
AI 2000	76.8	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
AI 1800	76.8	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
AI 1500	76.8	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
AI 1200	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 1000	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 900	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 800	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 700	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 600	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 500	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 400	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 300	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 200	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 100	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 0	76.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

22229 ALAMEDA, CALIFORNIA

73-77

YEARS

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

19
HOURS (U.S.T.)

3085

NNNN

5703 CEILING VERSUS VISIBILITY JAN 68

NNN

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	58.1	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 20000	60.0	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
18000	60.0	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
16000	60.0	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
14000	60.7	85.2	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
12000	61.3	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
10000	61.3	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
9000	61.3	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
8000	62.6	87.7	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
7000	62.6	87.7	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
6000	62.6	87.7	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
5000	62.6	87.7	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
4500	62.6	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
4000	62.6	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
3500	62.6	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
3000	63.2	89.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
2500	63.2	89.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
2000	63.2	89.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
1800	64.5	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
1500	64.5	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
1200	64.5	92.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
1000	64.5	92.9	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
900	64.5	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
800	64.5	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
700	65.2	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
600	65.2	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
500	65.2	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
400	65.2	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
300	65.2	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
200	65.2	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
100	65.2	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	65.2	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

33229

ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MAY

22
HOURS (P. T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	60.7	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
≥ 20000	62.6	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
18000	62.6	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
16000	62.6	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
14000	62.6	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
12000	63.9	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
10000	63.9	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
8000	63.9	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
7000	64.5	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
6000	64.5	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
5000	64.5	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
4500	65.2	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
4000	65.2	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
3500	65.2	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
3000	65.8	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
2500	65.8	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
2000	65.8	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
1800	66.5	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
1600	67.7	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
1400	69.7	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
1200	70.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
1000	70.3	93.6	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
900	72.3	96.1	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
800	72.9	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
700	72.9	98.7	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
600	72.9	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
500	72.9	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400	72.9	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	72.9	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	72.9	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	72.9	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	72.9	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA

73-77

YEARS

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURS (PERCENT)

3083

5703

CEILING VERSUS VISIBILITY JAN 68

NNP

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½
NO CEILING	57.3	72.7	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
≥ 20000	60.1	76.3	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
18000	60.1	76.4	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
16000	60.4	76.6	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
14000	60.5	76.8	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
12000	61.2	77.6	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
10000	61.5	78.0	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
9000	61.7	78.2	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5
8000	62.6	79.2	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
7000	62.6	79.3	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5
6000	62.7	79.3	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6
5000	63.0	79.6	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
4500	63.4	80.1	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4
4000	63.4	80.2	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5
3500	63.5	80.3	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
3000	64.2	81.0	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
2500	64.6	81.5	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
2000	65.8	83.1	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5
1800	66.4	84.0	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
1500	67.5	86.7	87.1	87.2	87.3	87.3	87.3	87.3	87.3	87.3	87.3
1200	69.4	90.2	90.6	90.7	90.8	90.8	90.8	90.8	90.8	90.8	90.8
1000	70.3	92.8	93.4	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
900	70.5	94.3	94.8	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.1
800	70.9	95.2	95.9	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
700	71.4	96.9	97.6	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8
600	71.5	98.0	98.6	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9
500	71.5	98.6	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
400	71.6	98.7	99.4	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
300	71.6	98.7	99.4	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
200	71.6	98.7	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
100	71.6	98.7	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
0	71.6	98.7	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

1239

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA 73-77 YEARS MONTH 01 HOURS (P. T.)

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	48.0	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
≥ 20000	49.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
18000	49.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
16000	49.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
14000	50.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
12000	50.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
10000	50.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
9000	50.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
8000	50.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
7000	50.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
6000	50.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
5000	50.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
4500	50.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
4000	50.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
3500	52.0	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
3000	52.0	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
2500	52.0	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
2000	52.7	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
1800	52.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
1500	55.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
1200	58.0	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
1000	60.7	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
900	62.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
800	66.0	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
700	66.0	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
600	66.0	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
500	66.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
400	66.7	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
300	66.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	66.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	66.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	66.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 150

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

MM

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURLY (% T.)

3081

MM

5703 CEILING VERSUS VISIBILITY JAN 68

1234-18766

MM

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾
NO CEILING	44.0	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
≥ 20000	44.7	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
18000	45.3	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
16000	45.3	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
14000	45.3	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
12000	45.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
10000	46.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
9000	46.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
8000	46.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
7000	46.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
6000	46.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
5000	46.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
4500	47.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
4000	47.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
3500	48.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
3000	48.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
2500	48.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
2000	48.7	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
1800	48.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
1500	50.7	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
1200	54.7	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
1000	58.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
900	60.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
800	60.0	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
700	60.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
600	61.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
500	61.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
400	61.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
300	61.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
200	61.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
100	61.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
0	61.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

150

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA 73-77 YEARS MONTHLY HOURS (L.S.T.)

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16	≥ ¼	≥ 0	
NO CEILING	37.3	46.0	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
≥ 20000	38.7	48.7	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 18000	38.7	48.7	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 16000	38.7	48.7	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 14000	39.3	49.3	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
≥ 12000	41.3	53.3	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 10000	42.0	54.0	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 9000	42.0	54.0	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 8000	42.0	54.0	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 7000	42.0	54.0	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 6000	42.0	54.0	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 5000	42.0	54.0	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 4500	42.7	54.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 4000	42.7	54.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 3500	42.7	54.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 3000	42.7	54.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 2500	43.3	55.3	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
≥ 2000	44.0	57.3	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
≥ 1800	44.7	58.0	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 1500	49.3	64.0	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
≥ 1200	51.3	72.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 1000	52.7	80.7	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 900	52.7	84.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
≥ 800	52.7	86.7	90.7	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
≥ 700	52.7	88.7	92.7	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 600	52.7	90.7	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 500	52.7	92.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	52.7	93.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	52.7	93.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	52.7	93.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	52.7	93.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	52.7	93.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 150

NAVWEASERVCOM

WILLIAMSON

HOUNS & (A. T.)

財政部

5703 CEILING VERSUS VISIBILITY JAN 68

44

TOTAL NUMBER OF OBSERVATIONS

55

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

22229 ALAMEDA, CALIFORNIA 73-77 PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾
NO CEILING	64.0	80.7	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
AI 20000	66.7	85.3	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
AI 18000	66.7	85.3	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
AI 16000	66.7	85.3	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
AI 14000	68.0	87.3	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
AI 12000	68.0	87.3	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
AI 10000	68.7	89.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
AI 9000	68.7	89.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
AI 8000	68.7	89.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
AI 7000	68.7	89.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
AI 6000	68.7	89.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
AI 5000	68.7	89.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
AI 4500	68.7	89.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
AI 4000	68.7	89.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
AI 3500	68.7	89.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
AI 3000	68.7	89.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
AI 2500	69.3	90.0	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
AI 2000	70.0	90.7	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
AI 1800	70.0	90.7	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
AI 1500	72.0	94.0	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
AI 1200	72.0	94.7	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
AI 1000	72.0	94.7	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
AI 900	72.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 800	72.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 700	72.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 600	72.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 500	72.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 400	72.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 300	72.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 200	72.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 100	72.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 0	72.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 150

CEILING VERSUS VISIBILITY

345129 ALAMEDA, CALIFORNIA

73-77

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURLY (A.T.)

3077

NNNN

5703 CEILING VERSUS VISIBILITY JAN 68

1234-18766

NNNN

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ 5/16
NO CEILING	62.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 20000	66.0	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
18000	66.0	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
16000	66.0	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
14000	67.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
12000	68.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
10000	69.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
9000	70.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
8000	70.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
7000	70.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
6000	71.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
5000	71.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
4500	71.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
4000	71.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
3500	71.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
3000	71.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
2500	71.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
2000	71.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
1800	71.3	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
1500	72.7	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
1200	74.0	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
1000	74.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
900	74.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
800	74.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
700	74.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
600	74.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
500	74.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400	74.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	74.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	74.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	74.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	74.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

20229 ALAMEDA, CALIFORNIA 73-77 YEARS MONTH 19 HOURS (L.S.T.)

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)		VISIBILITY (STATUTE MILES)														
		≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING		54.0	72.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 20000		56.0	78.7	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
18000		56.0	78.7	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
16000		57.3	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
14000		58.7	81.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
12000		59.3	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
10000		59.3	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
9000		60.0	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
8000		60.7	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
7000		60.7	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
6000		60.7	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
5000		60.7	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
4500		60.7	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
4000		60.7	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
3500		60.7	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
3000		60.7	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
2500		60.7	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
2000		60.7	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
1800		60.7	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
1500		61.3	86.7	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
1200		64.7	90.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
1000		65.3	92.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
900		65.3	93.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
800		66.0	96.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
700		66.7	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
600		66.7	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
500		66.7	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400		66.7	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300		66.7	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200		66.7	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100		66.7	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0		66.7	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 150

3075

1234-18766

NNNN

5703 CEILING VERSUS VISIBILITY JAN 68

NNP

CEILING VERSUS VISIBILITY

3075
 ALAMEDA, CALIFORNIA
 73-77
 PERCENTAGE FREQUENCY OF OCCURRENCE
 (FROM HOURLY OBSERVATIONS)
 MONTH
 22
 HOURS (Z, T, I)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 5/16
NO CEILING	52.7	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
≥ 20000	54.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
18000	54.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
16000	54.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
14000	55.3	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
12000	55.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
10000	55.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
9000	55.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
8000	56.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
7000	56.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
6000	56.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
5000	56.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
4500	56.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
4000	56.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
3500	56.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
3000	56.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
2500	56.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
2000	56.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
1800	57.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
1500	58.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
1200	61.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
1000	64.0	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
900	65.3	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
800	65.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
700	65.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
600	66.7	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
500	66.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400	66.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	66.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	66.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	66.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	66.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 150

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

73-77

73-77

ALAMOSA, CALIFORNIA

88229

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL

HOURLY

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4
NO CEILING	50.6	65.3	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7
AI 20000	52.4	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
AI 18000	52.4	68.9	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
AI 16000	52.7	68.9	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
AI 14000	53.6	70.2	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6
AI 12000	54.2	71.4	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
AI 10000	54.6	72.0	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
AI 9000	54.8	72.2	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8
AI 8000	55.3	72.7	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
AI 7000	55.3	72.7	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
AI 6000	55.3	72.8	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
AI 5000	55.3	72.8	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
AI 4500	55.7	73.1	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
AI 4000	55.7	73.1	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
AI 3500	56.0	73.5	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1
AI 3000	56.0	73.5	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1
AI 2500	56.2	73.7	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
AI 2000	56.7	74.8	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
AI 1800	56.9	75.4	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
AI 1500	59.2	79.6	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4
AI 1200	61.3	84.3	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
AI 1000	62.7	88.4	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
AI 900	63.3	90.9	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4
AI 800	63.9	92.3	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
AI 700	64.0	94.6	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
AI 600	64.3	95.8	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
AI 500	64.4	97.3	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
AI 400	64.4	97.6	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
AI 300	64.6	97.7	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
AI 200	64.6	97.7	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
AI 100	64.6	97.7	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
0	64.6	97.7	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6

TOTAL NUMBER OF OBSERVATIONS 1200

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

33329 ALAMEDA, CALIFORNIA

73-77

YEARS

MM

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURS (L T.)

3073

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

MM

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ 5/16	≥ ¼
NO CEILING	39.6	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
20000	39.6	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
18000	39.6	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
16000	39.6	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
14000	39.6	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
12000	39.6	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
10000	39.6	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
9000	39.6	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
8000	40.0	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
7000	40.0	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
6000	40.0	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
5000	40.0	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
4500	40.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
4000	40.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
3500	40.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
3000	40.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
2500	40.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
2000	40.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
1800	41.3	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2
1500	42.6	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
1200	43.9	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
1000	49.0	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
900	49.7	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
800	51.6	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
700	52.3	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
600	52.9	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
500	53.6	85.8	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
400	53.6	91.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
300	53.6	93.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
200	53.6	93.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
100	53.6	93.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	53.6	93.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA 73-77 YEARS MONTH 04 HOURS (P.T.)

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16	≥ ¼
NO CEILING	32.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 20000	33.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
≥ 18000	33.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
≥ 16000	33.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
≥ 14000	34.2	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
≥ 12000	34.2	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
≥ 10000	34.2	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 9000	34.2	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 8000	34.2	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 7000	34.2	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 6000	34.2	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 5000	34.2	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 4500	34.2	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 4000	34.2	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 3500	34.2	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 3000	34.2	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 2500	34.8	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
≥ 2000	35.5	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1
≥ 1800	36.1	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 1500	38.7	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
≥ 1200	41.9	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
≥ 1000	47.1	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 900	47.7	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 800	48.4	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
≥ 700	49.7	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 600	50.3	81.3	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 500	51.6	87.7	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 400	51.6	89.7	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 300	51.6	91.0	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	51.6	91.0	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	51.6	91.0	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	51.6	91.0	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

23239 — ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH

HOURS (U.S.T.)

3071

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

MM

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	30.3	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
20000	31.0	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
18000	31.0	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
16000	31.0	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
14000	31.0	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
12000	31.0	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
10000	32.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
9000	32.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
8000	32.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
7000	32.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
6000	32.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
5000	32.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
4500	32.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
4000	32.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
3500	32.9	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
3000	32.9	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
2500	33.6	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
2000	34.8	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
1800	34.8	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
1500	38.7	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
1200	40.0	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
1000	41.9	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
900	43.9	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
800	45.2	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
700	45.2	76.8	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
600	45.2	81.3	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
500	45.2	85.2	89.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
400	45.2	88.4	94.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
300	45.2	89.0	95.5	98.1	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	45.2	89.0	95.5	98.1	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	45.2	89.0	95.5	98.1	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	45.2	89.0	95.5	98.1	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA 73-77 YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

NO. HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	41.9	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 20000	42.6	63.9	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
18000	42.6	63.9	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
16000	42.6	63.9	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
14000	42.6	63.9	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
12000	43.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
10000	43.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
9000	43.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
8000	43.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
7000	43.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
6000	43.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
5000	43.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
4500	43.2	66.5	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
4000	43.2	66.5	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
3500	43.2	66.5	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
3000	44.5	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
2500	44.5	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
2000	45.8	69.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
1800	47.1	71.0	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
1500	49.0	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
1200	51.0	79.4	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
1000	53.6	84.5	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
900	56.8	90.3	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
800	57.4	92.3	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
700	58.1	93.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
600	58.1	93.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
500	58.1	93.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
400	58.1	93.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
300	58.1	93.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
200	58.1	93.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
100	58.1	93.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	58.1	93.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS 153

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

MM

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

13
HOURS (A.M. TO P.M.)

3069

MM

5703 CEILING VERSUS VISIBILITY JAN 68

MM

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	64.5	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 20000	65.2	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
18000	65.2	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
16000	65.2	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
14000	65.2	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
12000	65.2	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
10000	67.1	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
9000	67.1	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
8000	67.1	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
7000	67.1	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
6000	67.7	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
5000	67.7	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
4500	67.7	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
4000	67.7	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
3500	67.7	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
3000	67.7	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
2500	68.4	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
2000	69.0	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
1800	69.0	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
1500	69.7	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
1200	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
1000	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
900	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
800	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
700	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
600	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
500	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
400	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
300	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
200	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
100	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	71.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA

73-77

YEARS

111 NORTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

14 HOURS (P.M.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16	≥ ¼
NO CEILING	71.6	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 20000	72.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 18000	72.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 16000	72.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 14000	72.9	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 12000	73.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 10000	73.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 8000	74.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 7000	74.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 6000	74.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 5000	74.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 4500	74.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 4000	74.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 3500	74.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 3000	74.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 2500	74.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 2000	74.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 1800	75.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1500	75.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 1200	75.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 1000	75.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	75.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	75.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	75.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	75.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	75.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	75.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	75.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	75.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	75.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	75.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURS 12 P. M.

3067

MM

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

MM

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	57.4	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 20000	58.1	81.9	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
18000	58.1	81.9	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
16000	58.1	81.9	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
14000	58.7	83.2	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
12000	58.7	83.2	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
10000	58.7	83.9	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
9000	58.7	83.9	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
8000	58.7	83.9	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
7000	59.4	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
6000	59.4	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
5000	59.4	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
4500	59.4	85.2	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
4000	59.4	85.2	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
3500	59.4	85.2	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
3000	59.4	85.2	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
2500	60.0	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
2000	60.0	86.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
1800	60.0	86.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
1500	61.0	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
1200	62.6	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
1000	62.6	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
900	63.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
800	64.5	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
700	65.2	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
600	65.2	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
500	65.2	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
400	65.2	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	65.2	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	65.2	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	65.2	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	65.2	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

22229 ALAMEDA, CALIFORNIA 73-77 YEARS 1941
 PERCENTAGE FREQUENCY OF OCCURRENCE
 (FROM HOURLY OBSERVATIONS) 22 HOURS (P. Y.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾
NO CEILING	49.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 20000	49.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
18000	49.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
AI AI 16000	49.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
14000	49.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
AI AI 12000	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
10000	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
AI AI 9000	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
8000	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
AI AI 7000	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
6000	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
AI AI 5000	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
4500	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
AI AI 4000	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
3500	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
AI AI 3000	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
2500	51.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
AI AI 2000	52.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
1800	52.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
AI AI 1500	52.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
1200	54.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
AI AI 1000	56.1	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
900	56.1	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
AI AI 800	57.4	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
700	57.4	87.1	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
AI AI 600	58.1	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
500	58.1	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
AI AI 400	58.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	58.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI AI 200	58.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	58.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI AI 0	58.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

1973

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

1973

1977

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾
NO CEILING	48.5	65.3	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5
≥ 20000	49.0	66.4	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
18000	49.0	66.4	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
16000	49.0	66.4	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
14000	49.0	66.4	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
12000	49.2	66.8	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9
10000	49.5	67.3	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5
9000	49.9	68.0	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
8000	49.9	68.0	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
7000	50.1	68.2	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
6000	50.2	68.2	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
5000	50.2	68.3	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5
4500	50.3	68.4	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
4000	50.3	68.7	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
3500	50.3	68.7	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
3000	50.4	68.8	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
2500	50.7	69.0	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
2000	51.0	69.4	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
1800	51.7	70.4	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6
1600	52.2	71.1	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
1500	53.8	74.1	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
1200	55.8	77.3	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5
1000	57.3	81.2	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5
900	58.4	84.6	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9
800	59.0	86.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
700	59.4	88.4	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
600	59.7	91.6	93.1	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3
500	59.8	94.0	95.7	96.1	96.2	96.2	96.2	96.2	96.2	96.2	96.2
400	59.9	95.7	98.5	99.1	99.2	99.3	99.3	99.4	99.4	99.4	99.4
300	59.9	95.9	98.9	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9
200	59.9	95.9	98.9	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9
100	59.9	95.9	98.9	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9
0	59.9	95.9	98.9	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

1240

NAVWEASERVCOM

3065

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

RRR

CEILING VERSUS VISIBILITY

23829 — ALAMEDA, CALIFORNIA — 73-77 — YEARS — AUC —
 PERCENTAGE FREQUENCY OF OCCURRENCE
 (FROM HOURLY OBSERVATIONS) — HOURS (P. T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	35.5	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 20000	36.8	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
18000	36.8	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
16000	36.8	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
14000	36.8	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
12000	37.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
10000	37.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
9000	37.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
8000	37.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
7000	37.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
6000	37.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
5000	37.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
4500	37.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
4000	37.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
3500	37.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
3000	37.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
2500	38.1	53.6	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
2000	38.1	54.8	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
1800	38.7	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
1500	38.7	57.4	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
1200	40.7	61.9	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
1000	44.5	67.1	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
900	47.1	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
800	47.7	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
700	49.0	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
600	51.0	83.9	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
500	51.0	90.3	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
400	51.0	94.2	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
300	51.0	94.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
200	51.0	94.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
100	51.0	94.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
0	51.0	94.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4

CEILING VERSUS VISIBILITY

33229 ALAMEDA, CALIFORNIA 73-77 YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

AMC

MOUSE (A. T.)

3063

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

BRP

CEILING (FEET)	VISIBILITY (STATUTE MILES)													≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	26.5	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 20000	27.1	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 18000	27.1	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 16000	27.1	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 14000	27.1	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 12000	27.7	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 10000	27.7	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 9000	27.7	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 8000	27.7	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 7000	27.7	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 6000	27.7	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 5000	27.7	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 4500	28.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 4000	28.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 3500	28.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 3000	28.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 2500	30.3	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
≥ 2000	30.3	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
≥ 1800	31.0	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
≥ 1500	32.3	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 1200	34.8	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
≥ 1000	40.0	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 900	41.9	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 800	43.2	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 700	43.9	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 600	45.8	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 500	46.5	83.2	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 400	46.5	91.0	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 300	46.5	92.9	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	46.5	92.9	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	46.5	92.9	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	46.5	92.9	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA 73-77 YEARS 07 HOURS (L.T.)
 23239 ALAMEDA, CALIFORNIA 73-77 YEARS 07 HOURS (L.T.)
 PERCENTAGE FREQUENCY OF OCCURRENCE
 (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	18.1	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
≥ 20000	18.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
18000	18.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
16000	18.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
14000	18.7	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
12000	18.7	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
10000	18.7	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
9000	18.7	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
8000	19.4	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
7000	19.4	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
6000	19.4	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
5000	19.4	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
4500	19.4	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
4000	19.4	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
3500	19.4	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
3000	21.3	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6
2500	21.9	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
2000	22.6	32.9	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6
1800	24.5	34.8	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
1500	27.7	38.7	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
1200	31.0	47.1	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
1000	33.6	54.8	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
900	36.8	60.7	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
800	36.8	63.9	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
700	36.8	71.0	73.6	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
600	37.4	78.1	81.3	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
500	37.4	82.6	88.4	90.3	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
400	37.4	86.5	93.6	96.8	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
300	37.4	86.5	94.2	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
200	37.4	86.5	94.2	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
100	37.4	86.5	94.2	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	37.4	86.5	94.2	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

ALIC

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

10 HOURS (P. Y.)

3061

MMMM

5703 CEILING VERSUS VISIBILITY JAN 68

1234-18766

IMP

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	27.1	47.1	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 20000	27.7	47.7	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
18000	27.7	47.7	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
16000	27.7	48.4	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
14000	29.0	50.3	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
12000	29.0	50.3	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
10000	29.7	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
9000	29.7	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
8000	29.7	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
7000	29.7	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
6000	29.7	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
5000	29.7	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
4500	29.7	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
4000	29.7	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
3500	29.7	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
3000	30.3	52.3	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
2500	31.6	53.6	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
2000	33.6	56.1	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
1800	35.5	58.1	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
1500	38.1	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
1200	41.3	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
1000	42.6	78.1	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
900	45.8	85.2	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
800	46.5	87.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
700	47.1	94.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
600	47.1	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
500	47.1	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
400	47.1	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
300	47.1	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
200	47.1	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
100	47.1	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
0	47.1	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

22229 ALAMEDA, CALIFORNIA 73-77 YEARS AUG MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

12 HOURS (P.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	63.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 20000	63.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
18000	65.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
16000	66.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
14000	67.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
12000	67.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
10000	67.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
9000	67.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
8000	67.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
7000	67.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
6000	67.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
5000	67.1	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
4500	67.7	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
4000	68.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
3500	68.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
3000	68.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
2500	69.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
2000	69.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
1800	69.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
1500	71.6	93.6	93.6	93.6	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2
1200	71.6	95.5	95.5	95.5	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1
1000	72.3	98.1	98.1	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7
900	72.9	99.4	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
800	72.9	99.4	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
700	72.9	99.4	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
600	72.9	99.4	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
500	72.9	99.4	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400	72.9	99.4	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	72.9	99.4	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	72.9	99.4	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	72.9	99.4	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	72.9	99.4	99.4	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

28229 ALAMEDA, CALIFORNIA

73-77

YEARS

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURS (A. T. T.)

3059

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

NNN

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	64.5	83.2	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 20000	65.0	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 18000	65.8	86.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 16000	67.1	87.7	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 14000	67.7	88.4	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 12000	68.4	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 10000	68.4	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 9000	68.4	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 8000	68.4	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 7000	68.4	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 6000	68.4	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 5000	68.4	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 4500	68.4	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 4000	68.4	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 3500	68.4	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 3000	69.0	89.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 2500	69.0	89.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 2000	70.3	91.6	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1800	71.0	92.3	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 1500	71.6	92.9	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1200	71.6	93.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 1000	72.9	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900	72.9	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	72.9	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 700	72.9	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 600	72.9	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	72.9	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	72.9	98.1	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	72.9	98.1	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	72.9	98.1	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	72.9	98.1	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	72.9	98.1	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA 73-77 YEARS 1946

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

19
HOURS (P. M.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	47.7	69.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 20000	67.7	69.7	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
18000	47.7	69.7	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
16000	49.0	71.0	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
14000	50.3	72.9	73.6	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
12000	51.0	74.2	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
10000	51.0	74.2	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
9000	51.0	74.2	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
8000	51.6	74.8	75.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
7000	51.6	74.8	75.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
6000	51.6	74.8	75.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
5000	51.6	74.8	75.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
4500	51.6	75.5	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
4000	51.6	75.5	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
3500	51.6	75.5	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
3000	51.6	75.5	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
2500	51.6	75.5	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
2000	52.3	76.1	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
1800	52.3	76.1	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
1500	55.5	79.4	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
1200	56.8	81.9	82.6	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
1000	58.1	84.5	85.8	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
900	58.1	87.1	88.4	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
800	59.4	88.4	89.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
700	60.0	92.3	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
600	60.0	94.2	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
500	60.0	94.2	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
400	60.0	96.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	60.0	96.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	60.0	96.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	60.0	96.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	60.0	96.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

ALIC

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

22
HOURS (P. T.)

3057

NNNN

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

NNP

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	44.5	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 20000	45.2	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
18000	45.2	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
16000	45.2	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
14000	45.2	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
12000	47.1	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
10000	47.1	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
9000	47.1	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
8000	47.1	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
7000	47.1	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
6000	47.1	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
5000	47.1	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
4500	47.1	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
4000	47.1	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
3500	47.1	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
3000	47.1	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
2500	47.1	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
2000	47.1	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
1800	47.1	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
1500	48.4	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
1200	50.3	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
1000	52.9	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
900	56.1	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
800	56.1	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
700	56.1	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
600	57.4	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
500	57.4	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
400	57.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
300	57.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
200	57.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
100	57.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
0	57.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA 73-77 YEARS 4146

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

HOURLY

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING												
≥ 20000	41.0	55.7	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9
≥ 18000	41.7	57.1	57.3	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 16000	41.7	57.2	57.4	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
≥ 14000	42.2	57.7	58.0	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 12000	42.7	58.8	59.1	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2
≥ 10000	43.3	59.6	59.9	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 9000	43.4	59.8	60.1	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
≥ 8000	43.4	59.8	60.1	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
≥ 7000	43.6	59.9	60.2	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3
≥ 6000	43.6	60.0	60.3	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4
≥ 5000	43.6	60.1	60.4	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5
≥ 4500	43.6	60.2	60.5	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6
≥ 4000	43.7	60.3	60.6	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9
≥ 3500	43.8	60.4	60.9	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
≥ 3000	43.8	60.6	60.9	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
≥ 2500	44.2	61.1	61.5	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6
≥ 2000	44.8	61.9	62.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
≥ 1800	45.3	63.1	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
≥ 1600	46.2	64.0	64.5	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6
≥ 1400	48.0	66.9	67.3	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
≥ 1200	49.8	71.2	71.8	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
≥ 1000	52.1	76.1	76.8	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
≥ 900	54.0	80.0	80.7	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
≥ 800	54.4	81.5	82.4	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
≥ 700	54.8	85.7	86.7	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9
≥ 600	55.6	89.7	90.8	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
≥ 500	55.7	92.7	94.5	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 400	55.7	94.9	97.7	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 300	55.7	95.2	98.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	55.7	95.2	98.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	55.7	95.2	98.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 0	55.7	95.2	98.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS 1240

CEILING VERSUS VISIBILITY

22229 ALAMEDA, CALIFORNIA

73-77

YEARS

SEP MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURS (24 HRS. T.)

3055

NNNN

5703 CEILING VERSUS VISIBILITY JAN 68

NNNN

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	32.0	46.0	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
≥ 20000	32.7	47.3	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
18000	32.7	47.3	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
16000	32.7	47.3	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
14000	34.0	49.3	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
12000	34.0	50.7	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
10000	34.0	51.3	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0
9000	34.0	51.3	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0
8000	34.0	51.3	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0
7000	34.0	51.3	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0
6000	34.7	52.7	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
5000	35.3	53.3	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
4500	36.0	54.0	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
4000	36.7	54.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
3500	37.3	55.3	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
3000	38.0	56.0	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
2500	38.0	57.3	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
2000	40.7	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
1800	40.7	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
1500	42.0	64.0	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
1200	42.7	64.7	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
1000	43.3	70.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
900	47.3	75.3	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
800	48.7	79.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
700	49.3	86.0	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
600	50.0	88.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
500	50.0	95.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
400	50.0	96.0	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
300	50.0	96.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	50.0	96.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	50.0	96.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	50.0	96.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

SEP
1968

YEARS

73-77

ALAMEDA, CALIFORNIA

23229

04
HOURS (S.T.)

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾
NO CEILING	27.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
AI 20000	28.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
AI 18000	28.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
AI 16000	28.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
AI 14000	29.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
AI 12000	29.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
AI 10000	29.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
AI 9000	29.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
AI 8000	29.3	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
AI 7000	29.3	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
AI 6000	30.0	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
AI 5000	31.3	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
AI 4500	32.0	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
AI 4000	32.0	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
AI 3500	32.0	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
AI 3000	34.0	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
AI 2500	35.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3
AI 2000	38.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
AI 1800	38.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
AI 1500	39.3	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
AI 1200	41.3	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
AI 1000	44.7	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
AI 900	46.0	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
AI 800	46.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
AI 700	48.0	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
AI 600	48.0	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
AI 500	48.0	89.3	91.3	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0
AI 400	48.0	92.7	96.0	97.3	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 300	48.0	93.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 200	48.0	93.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 100	48.0	93.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 0	48.0	93.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

130

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

SEP 1971

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURS (L, T, N)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	20.0	30.7	32.0	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
20000	20.0	31.3	32.7	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
18000	20.0	31.3	32.7	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
16000	20.0	31.3	32.7	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
14000	20.7	32.0	33.3	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
12000	20.7	32.7	34.0	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7
10000	22.7	34.7	36.0	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
9000	23.3	35.3	36.7	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
8000	24.0	36.0	37.3	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
7000	24.0	36.0	37.3	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
6000	24.0	36.0	37.3	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
5000	24.0	36.7	38.0	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
4500	24.0	36.7	38.0	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
4000	24.0	37.3	38.7	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
3500	24.0	37.3	38.7	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
3000	25.3	38.7	40.0	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
2500	26.0	39.3	40.7	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
2000	29.3	44.7	46.0	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
1800	30.7	46.7	48.0	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7
1500	32.0	50.7	52.0	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
1200	33.3	56.7	58.0	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
1000	34.0	62.0	63.3	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
900	34.7	65.3	66.7	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
800	34.7	69.3	70.7	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
700	35.3	74.7	78.7	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
600	35.3	80.0	86.0	87.3	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
500	36.7	84.7	92.0	94.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
400	36.7	85.3	92.7	96.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
300	36.7	85.3	92.7	96.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
200	36.7	85.3	92.7	96.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
100	36.7	85.3	92.7	96.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
0	36.7	85.3	92.7	96.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

150

CEILING VERSUS VISIBILITY

28229

ALAMEDA, CALIFORNIA

73-77

YEARS

SEP

2011

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

10
HOURS (P. T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 5/16	≥ 1/4
NO CEILING	26.7	44.7	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3
≥ 20000	28.0	46.7	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 18000	28.0	46.7	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 16000	28.0	46.7	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 14000	28.7	47.3	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
≥ 12000	28.7	47.3	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
≥ 10000	28.7	47.3	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
≥ 9000	28.7	47.3	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
≥ 8000	29.3	48.7	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 7000	29.3	48.7	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 6000	29.3	48.7	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 5000	30.7	50.0	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
≥ 4500	32.7	52.0	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 4000	32.7	52.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 3500	32.7	52.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 3000	33.3	54.0	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
≥ 2500	34.0	55.3	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
≥ 2000	36.0	58.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 1800	36.7	60.7	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
≥ 1500	37.3	63.3	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
≥ 1200	38.7	69.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 1000	40.7	76.0	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 900	41.3	82.7	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 800	42.0	87.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 700	42.0	88.7	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 600	42.0	92.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 500	42.0	92.7	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	42.0	92.7	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	42.0	92.7	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	42.0	92.7	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	42.0	92.7	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	42.0	92.7	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

NAVWEASERVCOM

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

CEILING VERSUS VISIBILITY

23229

ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

SAP

NOV 1977

3051

1234-18766

MMMM

5703 CEILING VERSUS VISIBILITY JAN 68

RRR

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	43.3	76.0	78.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 20000	44.7	78.0	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
18000	44.7	78.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
16000	44.7	78.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
14000	44.7	78.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
12000	44.7	78.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
10000	44.7	78.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
9000	44.7	78.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
8000	45.3	80.7	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
7000	45.3	80.7	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
6000	45.3	80.7	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
5000	45.3	80.7	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
4500	46.0	81.3	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
4000	46.7	82.0	84.0	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
3500	47.3	83.3	85.3	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
3000	48.0	85.3	87.3	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
2500	49.3	87.3	89.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
2000	51.3	89.3	91.3	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
1800	51.3	89.3	91.3	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
1500	52.0	92.0	94.0	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
1200	53.3	94.7	96.7	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
1000	53.3	96.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
900	53.3	96.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
800	53.3	96.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
700	53.3	96.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
600	53.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
500	53.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400	53.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	53.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	53.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	53.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	53.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

CEILING VERSUS VISIBILITY

SEP
MONTH

YEAR

73-77

ALAMEDA, CALIFORNIA

23229

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

16
HOURS (P. T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	46.7	81.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 20000	48.7	84.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
18000	48.7	84.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
16000	49.3	86.0	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
14000	49.3	86.0	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
12000	50.0	86.7	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
10000	50.0	88.0	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
9000	50.7	88.7	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
8000	52.0	90.0	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
7000	52.0	90.7	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
6000	52.0	90.7	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
5000	52.7	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
4500	52.7	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
4000	54.0	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
3500	54.0	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
3000	54.0	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
2500	54.7	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
2000	55.2	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
1800	55.3	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
1500	55.3	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
1200	56.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
1000	56.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
900	56.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
800	56.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
700	56.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
600	56.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
500	56.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
400	56.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
300	56.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
200	56.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
100	56.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
0	56.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

150

CEILING VERSUS VISIBILITY

22229 ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

SEP
MONTH

HOURS
(A.M. T.)

3049

NNNN

5703 CEILING VERSUS VISIBILITY JAN 68

NNNN

CEILING (FEET)	VISIBILITY (STATUTE MILES)													≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16	≥ ¼	
NO CEILING	44.7	74.7	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.7
≥ 20000	45.3	76.7	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.7
≥ 18000	45.3	76.7	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.7
≥ 16000	45.3	76.7	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.7
≥ 14000	46.0	78.0	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	80.0
≥ 12000	46.0	78.0	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	80.0
≥ 10000	46.7	79.3	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	81.3
≥ 9000	46.7	79.3	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	81.3
≥ 8000	46.7	80.0	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	82.0
≥ 7000	47.3	81.3	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	83.3
≥ 6000	47.3	81.3	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	83.3
≥ 5000	48.0	82.0	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	84.0
≥ 4500	48.7	82.7	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.7
≥ 4000	48.7	82.7	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.7
≥ 3500	49.3	83.3	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	85.3
≥ 3000	49.3	83.3	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	85.3
≥ 2500	50.0	84.0	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	86.0
≥ 2000	50.0	84.7	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.7
≥ 1800	50.0	84.7	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.7
≥ 1500	50.0	84.7	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.7
≥ 1200	50.7	86.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.7
≥ 1000	51.3	87.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	90.0
≥ 900	51.3	90.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	93.3
≥ 800	51.3	92.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	95.3
≥ 700	51.3	93.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	96.7
≥ 600	51.3	95.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	98.7
≥ 500	51.3	95.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	98.7
≥ 400	51.3	95.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	99.3
≥ 300	51.3	95.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	99.3
≥ 200	51.3	95.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	99.3
≥ 100	51.3	95.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	99.3
0	51.3	95.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	99.3

TOTAL NUMBER OF OBSERVATIONS

150

CEILING VERSUS VISIBILITY

SEP
1968

YEARS

73-77

ALAMEDA, CALIFORNIA

2-1-1968

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

22
HOURS (T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½
NO CEILING	40.0	57.3	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
≥ 20000	40.7	59.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
AI 18000	40.7	59.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
AI 16000	40.7	59.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
AI 14000	41.3	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
AI 12000	41.3	61.3	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
AI 10000	41.3	61.3	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
AI 9000	41.3	61.3	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
AI 8000	41.3	62.0	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
AI 7000	42.0	62.7	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
AI 6000	42.0	62.7	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
AI 5000	44.0	65.3	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
AI 4500	44.0	65.3	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
AI 4000	44.0	65.3	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
AI 3500	44.7	66.0	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
AI 3000	44.7	66.0	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
AI 2500	46.0	67.3	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
AI 2000	46.7	68.0	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
AI 1800	47.3	69.3	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
AI 1500	48.0	70.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
AI 1200	48.7	71.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
AI 1000	49.3	74.7	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
AI 900	51.3	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
AI 800	51.3	84.0	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
AI 700	51.3	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
AI 600	51.3	92.7	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
AI 500	51.3	95.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
AI 400	51.3	97.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 300	51.3	97.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 200	51.3	97.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AI 100	51.3	97.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	51.3	97.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

CEILING VERSUS VISIBILITY

SEP
MONTH

YEARS

73-77

ALAMEDA, CALIFORNIA

23229

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURS (1-24)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	35.1	55.8	56.9	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
≥ 20000	26.0	57.5	58.7	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8
18000	36.0	57.6	58.8	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
16000	36.1	57.8	58.9	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1
14000	36.8	58.7	59.8	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
12000	36.8	59.1	60.3	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4
10000	37.2	59.8	60.9	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
9000	37.3	59.9	61.1	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
8000	37.8	60.8	62.0	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2
7000	37.9	61.3	62.4	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
6000	38.1	61.5	62.7	62.8	62.8	62.8	62.8	62.8	62.8	62.8	62.8	62.8
5000	38.9	62.5	63.7	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8
4500	39.5	63.3	64.4	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6
4000	39.8	63.8	65.0	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
3500	40.2	64.3	65.5	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7
3000	40.8	65.3	66.4	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
2500	41.7	66.5	67.7	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
2000	43.4	68.8	69.9	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2
1800	43.8	69.5	70.7	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
1500	44.5	72.0	73.2	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5
1200	45.6	74.6	75.9	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
1000	46.8	78.5	79.9	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3
900	47.7	81.8	83.3	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
800	47.9	84.5	86.1	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
700	48.3	87.9	89.8	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
600	48.4	91.1	93.5	94.1	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
500	48.6	93.4	96.3	97.2	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
400	48.6	94.3	97.6	98.8	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
300	48.6	94.3	97.8	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
200	48.6	94.3	97.8	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
100	48.6	94.3	97.8	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
0	48.6	94.3	97.8	99.0	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7

TOTAL NUMBER OF OBSERVATIONS 1200

NAWWEASERVCOM

3047

MMNN

5703 CEILING VERSUS VISIBILITY JAN 68

1234-18766

MMNN

CEILING VERSUS VISIBILITY

22229

ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

01

HOURS (% T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	43.2	64.5	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 20000	43.9	67.1	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
18000	43.9	67.1	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
14000	43.9	67.1	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
10000	43.9	67.1	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
8000	43.9	67.1	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
7000	43.9	67.1	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
6000	45.2	69.7	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
5000	45.2	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
4500	45.8	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
4000	45.8	72.3	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
3500	46.5	72.9	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
3000	47.1	73.6	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
2500	47.7	75.5	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
2000	47.7	76.1	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
1800	47.7	76.1	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
1500	49.0	78.1	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
1200	49.7	78.7	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
1000	49.7	80.0	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
900	52.3	83.2	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
800	52.9	87.1	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
700	53.6	91.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
600	53.6	92.3	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
500	54.2	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
400	54.2	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
300	54.2	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
200	54.8	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
100	54.8	96.8	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	54.8	96.8	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

23229 ALAMEDA, CALIFORNIA

73-77

YEARS

11:57

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURS (G.M.T.)

3045

5703

CEILING VERSUS VISIBILITY JAN 68

1234-18766

0817

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	36.1	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
20000	37.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
18000	37.4	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
16000	37.4	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
14000	37.4	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
12000	37.4	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
10000	38.1	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
9000	38.7	63.2	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
8000	39.4	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
7000	39.4	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
6000	39.4	65.8	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
5000	40.0	66.5	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
4500	40.0	67.1	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
4000	40.0	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
3500	40.0	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
3000	40.0	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
2500	41.3	69.7	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
2000	42.6	71.0	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
1800	43.2	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
1500	46.5	78.1	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
1200	47.1	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
1000	48.4	87.7	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
900	48.4	89.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
800	48.4	91.6	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
700	48.4	93.6	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
600	49.0	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
500	49.0	95.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
400	49.0	95.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
300	49.0	95.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
200	49.0	95.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
100	49.0	95.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
0	49.0	95.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

ALAMEDA, CALIFORNIA

73-77

YEARS

1967

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

16 (A. T.)

3043

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

188P

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	27.7	52.9	58.7	63.2	64.5	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 20000	28.4	58.1	63.9	68.0	71.0	73.6	73.6	73.6	73.6	73.6	73.6	73.6
18000	28.4	58.1	63.9	69.0	71.0	73.6	73.6	73.6	73.6	73.6	73.6	73.6
16000	28.4	58.1	63.9	69.0	71.0	73.6	73.6	73.6	73.6	73.6	73.6	73.6
14000	28.4	58.1	63.9	69.0	71.0	73.6	73.6	73.6	73.6	73.6	73.6	73.6
12000	28.4	58.1	63.9	69.0	71.0	73.6	73.6	73.6	73.6	73.6	73.6	73.6
10000	29.7	60.7	66.5	71.6	73.6	76.1	76.1	76.1	76.1	76.1	76.1	76.1
9000	29.7	60.7	66.5	72.3	74.2	76.8	76.8	76.8	76.8	76.8	76.8	76.8
8000	29.7	60.7	66.5	72.3	74.2	76.8	76.8	76.8	76.8	76.8	76.8	76.8
7000	29.7	61.3	67.1	72.9	74.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4
6000	29.7	61.3	67.1	72.9	74.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4
5000	30.3	61.9	67.7	73.6	75.5	78.1	78.1	78.1	78.1	78.1	78.1	78.1
4500	30.3	63.2	69.0	74.8	76.8	79.4	79.4	79.4	79.4	79.4	79.4	79.4
4000	30.3	63.2	69.0	74.8	76.8	79.4	79.4	79.4	79.4	79.4	79.4	79.4
3500	31.0	63.9	69.7	75.5	77.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0
3000	31.0	63.9	69.7	75.5	77.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0
2500	31.6	65.2	71.0	76.8	78.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3
2000	32.3	67.1	72.9	78.7	80.7	83.2	83.2	83.2	83.2	83.2	83.2	83.2
1800	34.8	71.0	76.8	82.6	84.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1
1500	35.5	72.3	78.1	83.9	85.8	88.4	88.4	88.4	88.4	88.4	88.4	88.4
1200	36.8	76.8	82.6	88.4	90.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9
1000	36.8	77.4	83.2	89.0	91.0	93.6	93.6	93.6	93.6	93.6	93.6	93.6
900	37.4	79.4	85.2	91.0	92.9	95.5	95.5	95.5	95.5	95.5	95.5	95.5
800	37.4	79.4	85.2	91.0	92.9	95.5	95.5	95.5	95.5	95.5	95.5	95.5
700	37.4	80.0	85.8	91.6	93.6	96.1	96.1	96.1	96.1	96.1	96.1	96.1
600	37.4	80.0	85.8	92.3	94.2	96.8	96.8	96.8	96.8	96.8	96.8	96.8
500	37.4	80.0	85.8	92.3	94.2	96.8	96.8	96.8	96.8	96.8	96.8	96.8
400	37.4	80.0	85.8	92.3	94.2	96.8	96.8	96.8	96.8	96.8	96.8	96.8
300	37.4	80.0	85.8	92.3	94.2	96.8	96.8	96.8	96.8	96.8	96.8	96.8
200	37.4	80.0	85.8	92.3	94.2	96.8	96.8	96.8	96.8	96.8	96.8	96.8
100	37.4	80.0	85.8	92.3	94.2	96.8	96.8	96.8	96.8	96.8	96.8	96.8
0	37.4	80.0	85.8	92.3	94.2	96.8	96.8	96.8	96.8	96.8	96.8	96.8

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

232239 — ALAMEDA, CALIFORNIA — 73-77 — 100%
 PERCENTAGE FREQUENCY OF OCCURRENCE
 (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	33.6	65.8	71.6	74.2	76.1	76.8	77.4	77.4	77.4	77.4	77.4	77.4
≥ 20000	35.5	71.0	77.4	80.0	82.6	83.2	83.9	83.9	83.9	83.9	83.9	83.9
≥ 18000	35.5	71.0	77.4	80.0	82.6	83.2	83.9	83.9	83.9	83.9	83.9	83.9
≥ 16000	35.5	71.0	77.4	80.0	82.6	83.2	83.9	83.9	83.9	83.9	83.9	83.9
≥ 14000	35.5	71.0	77.4	80.0	82.6	83.2	83.9	83.9	83.9	83.9	83.9	83.9
≥ 12000	36.8	72.9	79.4	81.9	84.5	85.2	85.8	85.8	85.8	85.8	85.8	85.8
≥ 10000	37.4	73.6	80.0	82.6	85.2	85.8	86.5	86.5	86.5	86.5	86.5	86.5
≥ 9000	37.4	73.6	80.7	83.2	85.8	86.5	87.1	87.1	87.1	87.1	87.1	87.1
≥ 8000	38.1	74.8	81.9	84.5	87.1	87.7	88.4	88.4	88.4	88.4	88.4	88.4
≥ 7000	38.1	74.8	81.9	84.5	87.1	87.7	88.4	88.4	88.4	88.4	88.4	88.4
≥ 6000	38.1	74.8	81.9	84.5	87.1	87.7	88.4	88.4	88.4	88.4	88.4	88.4
≥ 5000	38.1	75.5	82.6	85.2	87.7	88.4	89.0	89.0	89.0	89.0	89.0	89.0
≥ 4500	38.7	76.8	83.9	86.5	89.0	89.7	90.3	90.3	90.3	90.3	90.3	90.3
≥ 4000	38.7	77.4	84.5	87.7	90.3	91.0	91.6	91.6	91.6	91.6	91.6	91.6
≥ 3500	40.0	78.7	85.8	89.0	91.6	92.3	92.9	92.9	92.9	92.9	92.9	92.9
≥ 3000	40.7	79.4	86.5	89.7	92.3	92.9	93.6	93.6	93.6	93.6	93.6	93.6
≥ 2500	40.7	79.4	87.1	90.3	92.9	93.6	94.2	94.2	94.2	94.2	94.2	94.2
≥ 2000	41.9	80.7	88.4	91.6	94.2	94.8	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1800	41.9	81.3	89.0	92.3	94.8	95.5	96.1	96.1	96.1	96.1	96.1	96.1
≥ 1500	42.6	83.9	91.6	94.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7
≥ 1200	42.6	83.9	91.6	94.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7
≥ 1000	42.6	84.5	92.3	96.1	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	42.6	84.5	92.3	96.1	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	42.6	84.5	92.3	96.1	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	42.6	84.5	92.3	96.1	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	42.6	84.5	92.3	96.1	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	42.6	84.5	92.3	96.1	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	42.6	84.5	92.3	96.1	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	42.6	84.5	92.3	96.1	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	42.6	84.5	92.3	96.1	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	42.6	84.5	92.3	96.1	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0
0	42.6	84.5	92.3	96.1	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

23222 ALAMEDA, CALIFORNIA

73-77

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

1967 MONTH

HOURLY T.

3041

NNNN

5703 CEILING VERSUS VISIBILITY JAN 68

NNN

CEILING (FEET)	VISIBILITY (STATUTE MILES)													≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	36.8	72.3	72.9	74.2	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 20000	40.0	80.0	81.3	82.6	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 18000	40.0	80.0	81.3	82.6	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 16000	40.0	80.0	81.3	82.6	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 14000	40.7	80.7	81.9	83.2	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 12000	41.3	81.9	83.2	84.5	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 10000	41.9	83.2	84.5	85.8	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 9000	42.6	83.9	85.2	86.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 8000	43.9	85.2	86.5	87.7	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 7000	44.5	85.8	87.1	88.4	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 6000	44.5	85.8	87.1	88.4	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 5000	45.2	87.1	88.4	89.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 4500	46.5	89.0	90.3	91.6	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 4000	47.7	90.3	91.6	92.9	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 3500	49.0	91.6	92.9	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 3000	49.0	91.6	92.9	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 2500	49.7	92.9	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 2000	50.3	94.2	95.5	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 1800	50.3	94.2	95.5	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 1500	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 1200	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 1000	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 900	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 800	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 700	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 0	51.0	95.5	96.8	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239 ALAMEDA, CALIFORNIA

73-77

YEAR

1001

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

10
HOURS (S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	47.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
≥ 20000	49.0	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
18000	49.0	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
16000	49.0	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
14000	49.7	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
12000	51.0	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
10000	51.6	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
9000	51.6	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
8000	53.6	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
7000	54.2	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
6000	54.2	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
5000	54.2	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
4500	54.8	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
4000	54.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
3500	54.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
3000	54.8	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
2500	54.8	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
2000	54.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
1800	54.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
1500	54.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
1200	54.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
1000	55.5	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
900	55.5	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
800	55.5	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
700	55.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
600	55.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
500	55.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400	55.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	55.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	55.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	55.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	55.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

222219 ALAMEDA, CALIFORNIA

73-77

YEARS

1017

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

22

HOURLY (P. T. I.)

3039

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

1117

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 5/16
NO CEILING	48.4	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
AI 20000	50.3	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
AI 18000	50.3	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
AI 16000	50.3	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
AI 14000	50.3	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
AI 12000	51.0	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
AI 10000	51.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
AI 9000	51.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
AI 8000	52.3	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
AI 7000	52.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
AI 6000	53.6	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
AI 5000	54.2	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
AI 4500	54.2	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
AI 4000	54.2	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
AI 3500	54.2	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
AI 3000	54.2	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
AI 2500	54.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
AI 2000	55.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
AI 1800	55.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
AI 1500	57.4	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
AI 1200	58.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
AI 1000	58.1	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
AI 900	58.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
AI 800	58.7	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
AI 700	58.7	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 600	58.7	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 500	58.7	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 400	58.7	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 300	58.7	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 200	58.7	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 100	58.7	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 0	58.7	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239 STATION
 ALAMEDA, CALIFORNIA STATION NAME
 73-77 YEARS
 OCT MONTH
 ALL HOURS (LST.)

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	37.5	64.4	66.5	67.7	68.3	68.7	68.9	68.9	68.9	68.9	68.9	68.9
≥ 20000	39.0	68.3	70.7	71.9	72.7	73.1	73.2	73.2	73.2	73.2	73.2	73.2
≥ 18000	39.0	68.4	70.7	71.9	72.7	73.2	73.3	73.3	73.3	73.3	73.3	73.3
≥ 16000	39.0	68.4	70.7	71.9	72.7	73.2	73.3	73.3	73.3	73.3	73.3	73.3
≥ 14000	39.1	69.0	71.3	72.5	73.3	73.7	73.9	73.9	73.9	73.9	73.9	73.9
≥ 12000	39.8	70.3	72.7	74.0	74.8	75.2	75.3	75.3	75.3	75.3	75.3	75.3
≥ 10000	40.4	71.2	73.6	74.9	75.7	76.1	76.3	76.3	76.3	76.3	76.3	76.3
≥ 9000	40.6	71.5	74.0	75.3	76.1	76.5	76.7	76.7	76.7	76.7	76.7	76.7
≥ 8000	41.4	73.1	75.6	76.9	77.7	78.1	78.2	78.2	78.2	78.2	78.2	78.2
≥ 7000	41.5	73.4	75.9	77.2	78.1	78.5	78.6	78.6	78.6	78.6	78.6	78.6
≥ 6000	41.9	74.0	76.5	77.8	78.7	79.1	79.3	79.3	79.3	79.3	79.3	79.3
≥ 5000	42.3	74.7	77.3	78.6	79.4	79.8	80.0	80.0	80.0	80.0	80.0	80.0
≥ 4500	42.7	75.7	78.2	79.5	80.4	80.8	81.0	81.0	81.0	81.0	81.0	81.0
≥ 4000	42.9	76.2	78.8	80.2	81.1	81.5	81.6	81.6	81.6	81.6	81.6	81.6
≥ 3500	43.3	76.6	79.2	80.6	81.5	81.9	82.0	82.0	82.0	82.0	82.0	82.0
≥ 3000	43.8	77.6	80.2	81.5	82.4	82.8	83.0	83.0	83.0	83.0	83.0	83.0
≥ 2500	44.2	78.5	81.1	82.6	83.5	83.9	84.0	84.0	84.0	84.0	84.0	84.0
≥ 2000	45.2	80.2	82.8	84.3	85.2	85.6	85.9	85.9	85.9	85.9	85.9	85.9
≥ 1800	45.3	81.1	83.7	85.2	86.1	86.5	86.8	86.8	86.8	86.8	86.8	86.8
≥ 1500	46.8	84.4	87.1	88.6	89.4	89.8	90.2	90.2	90.2	90.2	90.2	90.2
≥ 1200	47.3	86.7	89.4	90.8	91.7	92.1	92.4	92.4	92.4	92.4	92.4	92.4
≥ 1000	47.9	88.9	91.6	93.2	94.0	94.4	94.8	94.8	94.8	94.8	94.8	94.8
≥ 900	47.9	89.7	92.4	94.0	94.9	95.3	95.7	95.7	95.7	95.7	95.7	95.7
≥ 800	48.1	90.5	93.2	94.8	95.7	96.1	96.6	96.6	96.6	96.6	96.6	96.6
≥ 700	48.1	91.2	94.2	95.7	96.7	97.1	97.6	97.6	97.6	97.6	97.6	97.6
≥ 600	48.2	91.5	94.5	96.1	97.1	97.5	98.0	98.0	98.0	98.0	98.0	98.0
≥ 500	48.2	91.6	94.9	96.5	97.5	97.9	98.6	98.6	98.6	98.6	98.6	98.6
≥ 400	48.2	91.8	95.2	96.9	98.0	98.4	99.2	99.4	99.4	99.4	99.4	99.4
≥ 300	48.2	91.8	95.2	96.9	98.0	98.5	99.4	99.6	99.6	99.6	99.6	99.6
≥ 200	48.2	91.8	95.2	96.9	98.0	98.5	99.4	99.6	99.6	99.6	99.6	99.6
≥ 100	48.2	91.8	95.2	96.9	98.0	98.5	99.4	99.6	99.6	99.6	99.6	99.6
0	48.2	91.8	95.2	96.9	98.0	98.5	99.4	99.6	99.6	99.6	99.6	99.6

TOTAL NUMBER OF OBSERVATIONS 1240

CEILING VERSUS VISIBILITY

23239 STATION ALAMEDA, CALIFORNIA

73-77

YEAR

NOV MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

01 HOURS (P. M. Y.)

3037

MMH

5703 CEILING VERSUS VISIBILITY JAN 68

MMH

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	40.7	52.7	57.3	60.0	61.3	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 20000	40.7	57.3	62.0	65.3	66.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3
18000	40.7	57.3	62.0	65.3	66.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3
AI AI	40.7	57.3	62.0	65.3	66.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3
16000	40.7	57.3	62.0	65.3	66.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3
AI AI	40.7	57.3	62.0	65.3	66.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3
14000	41.3	58.7	63.3	67.3	68.7	69.3	69.3	69.3	69.3	69.3	69.3	69.3
AI AI	41.3	58.7	63.3	67.3	68.7	69.3	69.3	69.3	69.3	69.3	69.3	69.3
12000	43.3	60.7	65.3	69.3	70.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3
AI AI	43.3	60.7	65.3	69.3	70.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3
10000	45.3	63.3	68.0	72.0	74.0	74.7	74.7	74.7	74.7	74.7	74.7	74.7
AI AI	45.3	63.3	68.0	72.0	74.0	74.7	74.7	74.7	74.7	74.7	74.7	74.7
9000	45.3	63.3	68.0	72.0	74.0	74.7	74.7	74.7	74.7	74.7	74.7	74.7
AI AI	45.3	63.3	68.0	72.0	74.0	74.7	74.7	74.7	74.7	74.7	74.7	74.7
8000	46.7	65.3	70.0	74.0	76.0	76.7	76.7	76.7	76.7	76.7	76.7	76.7
7000	46.7	65.3	70.0	74.0	76.0	76.7	76.7	76.7	76.7	76.7	76.7	76.7
AI AI	46.7	65.3	70.0	74.0	76.0	76.7	76.7	76.7	76.7	76.7	76.7	76.7
6000	46.7	66.0	70.7	74.7	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3
AI AI	46.7	66.0	70.7	74.7	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3
5000	46.7	66.0	70.7	74.7	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3
AI AI	46.7	66.0	70.7	74.7	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3
4500	47.3	66.7	71.3	75.3	78.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7
AI AI	47.3	66.7	71.3	75.3	78.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7
4000	47.3	66.7	71.3	75.3	78.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7
AI AI	47.3	66.7	71.3	75.3	78.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7
3500	48.7	68.0	72.7	77.3	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7
AI AI	48.7	68.0	72.7	77.3	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7
3000	48.7	68.0	72.7	77.3	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7
AI AI	48.7	68.0	72.7	77.3	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7
2500	50.7	70.7	75.3	80.0	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3
AI AI	50.7	70.7	75.3	80.0	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3
2000	52.0	73.3	78.0	82.7	85.3	86.0	86.0	86.0	86.0	86.0	86.0	86.0
AI AI	52.0	73.3	78.0	82.7	85.3	86.0	86.0	86.0	86.0	86.0	86.0	86.0
1800	52.0	74.0	78.7	83.3	86.0	86.7	86.7	86.7	86.7	86.7	86.7	86.7
AI AI	52.0	74.0	78.7	83.3	86.0	86.7	86.7	86.7	86.7	86.7	86.7	86.7
1500	52.0	74.0	78.7	83.3	86.0	86.7	86.7	86.7	86.7	86.7	86.7	86.7
AI AI	52.0	74.0	78.7	83.3	86.0	86.7	86.7	86.7	86.7	86.7	86.7	86.7
1200	54.7	78.0	82.7	87.3	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0
AI AI	54.7	78.0	82.7	87.3	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0
1000	54.7	78.0	82.7	87.3	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0
AI AI	54.7	78.0	82.7	87.3	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0
900	54.7	78.0	82.7	87.3	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0
AI AI	54.7	78.0	82.7	87.3	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0
800	54.7	78.7	83.3	88.0	92.0	92.7	92.7	92.7	92.7	92.7	92.7	92.7
AI AI	54.7	78.7	83.3	88.0	92.0	92.7	92.7	92.7	92.7	92.7	92.7	92.7
700	55.3	80.0	84.7	89.3	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7
AI AI	55.3	80.0	84.7	89.3	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7
600	55.3	80.7	85.3	90.0	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3
AI AI	55.3	80.7	85.3	90.0	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3
500	55.3	80.7	85.3	90.0	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3
AI AI	55.3	80.7	85.3	90.0	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3
400	55.3	81.3	86.0	92.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
AI AI	55.3	81.3	86.0	92.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
300	55.3	81.3	86.0	92.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
AI AI	55.3	81.3	86.0	92.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
200	55.3	81.3	86.0	92.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
AI AI	55.3	81.3	86.0	92.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
100	55.3	81.3	86.0	92.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
AI AI	55.3	81.3	86.0	92.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
0	55.3	81.3	86.0	92.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
AI AI	55.3	81.3	86.0	92.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0

TOTAL NUMBER OF OBSERVATIONS

150

CEILING VERSUS VISIBILITY

22219 STATION NO. ALAMEDA, CALIFORNIA STATION NAME 73-77 YEARS NOV MONTH 04 HOURS (L.S.T.)
 PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	36.7	54.7	58.0	61.3	62.0	62.0	62.7	62.7	62.7	62.7	62.7	62.7
≥ 20000	37.3	58.0	61.3	64.7	65.3	65.3	66.0	66.0	66.0	66.0	66.0	66.0
18000	37.3	58.0	61.3	64.7	65.3	65.3	66.0	66.0	66.0	66.0	66.0	66.0
16000	37.3	58.0	61.3	64.7	65.3	65.3	66.0	66.0	66.0	66.0	66.0	66.0
14000	37.3	58.0	61.3	64.7	65.3	65.3	66.0	66.0	66.0	66.0	66.0	66.0
12000	39.3	60.0	63.3	66.7	67.3	67.3	68.0	68.0	68.0	68.0	68.0	68.0
10000	40.0	62.0	65.3	68.7	69.3	69.3	70.0	70.0	70.0	70.0	70.0	70.0
9000	40.0	62.0	65.3	68.7	69.3	69.3	70.0	70.0	70.0	70.0	70.0	70.0
8000	40.7	63.3	66.7	70.0	71.3	71.3	72.0	72.0	72.0	72.0	72.0	72.0
7000	40.7	63.3	66.7	70.0	71.3	71.3	72.0	72.0	72.0	72.0	72.0	72.0
6000	42.7	66.0	69.3	72.7	74.0	74.0	74.7	74.7	74.7	74.7	74.7	74.7
5000	43.3	66.7	70.0	73.3	74.7	74.7	75.3	75.3	75.3	75.3	75.3	75.3
4500	43.3	66.7	70.0	73.3	74.7	74.7	75.3	75.3	75.3	75.3	75.3	75.3
4000	43.3	66.7	70.0	73.3	74.7	74.7	75.3	75.3	75.3	75.3	75.3	75.3
3500	44.7	68.7	72.0	75.3	76.7	76.7	77.3	77.3	77.3	77.3	77.3	77.3
3000	46.7	72.0	75.3	78.7	80.0	80.0	80.7	80.7	80.7	80.7	80.7	80.7
2500	47.3	72.7	76.0	79.3	80.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3
2000	47.3	74.7	78.0	81.3	82.7	82.7	84.0	84.0	84.0	84.0	84.0	84.0
1800	47.3	75.3	78.7	82.0	83.3	83.3	84.7	84.7	84.7	84.7	84.7	84.7
1500	48.0	76.0	79.3	83.3	85.3	85.3	86.7	86.7	86.7	86.7	86.7	86.7
1200	50.0	78.0	81.3	85.3	87.3	87.3	88.7	88.7	88.7	88.7	88.7	88.7
1000	51.3	80.0	83.3	87.3	89.3	89.3	90.7	90.7	90.7	90.7	90.7	90.7
900	51.3	81.3	84.7	88.7	90.7	90.7	92.0	92.0	92.0	92.0	92.0	92.0
800	51.3	81.3	84.7	88.7	90.7	90.7	92.0	92.0	92.0	92.0	92.0	92.0
700	51.3	81.3	84.7	88.7	90.7	90.7	92.0	92.0	92.0	92.0	92.0	92.0
600	51.3	82.7	86.0	90.0	92.7	92.7	94.0	94.0	94.0	94.0	94.0	94.0
500	51.3	82.7	86.0	90.0	92.7	92.7	94.0	94.0	94.0	94.0	94.0	94.0
400	51.3	82.7	86.7	90.7	94.0	94.0	95.3	95.3	95.3	95.3	95.3	95.3
300	51.3	82.7	86.7	90.7	94.7	94.7	96.0	96.0	96.0	96.0	96.0	96.0
200	51.3	82.7	86.7	90.7	94.7	94.7	96.0	96.0	96.0	96.0	96.0	96.0
100	51.3	82.7	86.7	90.7	94.7	94.7	96.0	96.0	96.0	96.0	96.0	96.0
0	51.3	82.7	86.7	90.7	94.7	94.7	96.0	96.0	96.0	96.0	96.0	96.0

TOTAL NUMBER OF OBSERVATIONS 150

CEILING VERSUS VISIBILITY

33239 STATION ALAMEDA, CALIFORNIA

73-77

YEARS

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

07 HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1	≥ 3/4	≥ 1/2	≥ 0
NO CEILING	31.3	44.7	48.0	52.0	58.0	59.3	60.0	60.0	60.0	60.0	60.0	60.7
≥ 20000	32.0	46.7	50.7	55.3	61.3	62.7	63.3	63.3	63.3	63.3	63.3	64.0
18000	32.0	46.7	50.7	55.3	61.3	62.7	63.3	63.3	63.3	63.3	63.3	64.0
16000	32.0	46.7	50.7	55.3	61.3	62.7	63.3	63.3	63.3	63.3	63.3	64.0
14000	32.0	47.3	51.3	56.0	62.0	63.3	64.0	64.0	64.0	64.0	64.0	64.7
12000	32.0	48.7	52.7	58.0	64.0	65.3	66.0	66.0	66.0	66.0	66.0	66.7
10000	32.7	50.0	54.0	59.3	65.3	66.7	67.3	67.3	67.3	67.3	67.3	68.0
9000	32.7	50.0	54.0	59.3	65.3	66.7	67.3	67.3	67.3	67.3	67.3	68.0
8000	34.7	52.0	56.0	61.3	67.3	68.7	69.3	69.3	69.3	69.3	69.3	70.0
7000	35.3	52.7	56.7	62.0	68.0	69.3	70.0	70.0	70.0	70.0	70.0	70.7
6000	35.3	52.7	56.7	62.0	68.0	69.3	70.0	70.0	70.0	70.0	70.0	70.7
5000	36.0	53.3	57.3	62.7	68.7	70.7	71.3	71.3	71.3	71.3	71.3	72.0
4500	37.3	54.7	58.7	64.0	70.0	72.0	72.7	72.7	72.7	72.7	72.7	73.3
4000	38.0	55.3	59.3	64.7	70.7	72.7	73.3	73.3	73.3	73.3	73.3	74.0
3500	38.7	56.0	60.0	65.3	71.3	73.3	74.0	74.0	74.0	74.0	74.0	74.7
3000	40.0	58.7	62.7	68.0	74.0	76.0	76.7	76.7	76.7	76.7	76.7	77.3
2500	40.7	60.0	64.7	70.7	76.7	78.7	79.3	79.3	79.3	79.3	79.3	80.0
2000	41.3	62.0	66.7	73.3	79.3	81.3	82.0	82.0	82.0	82.0	82.0	82.7
1800	42.0	62.7	67.3	74.0	80.0	82.0	82.7	82.7	82.7	82.7	82.7	83.3
1500	44.0	65.3	70.0	76.7	82.7	84.7	85.3	85.3	85.3	85.3	85.3	86.0
1200	44.7	66.0	70.7	77.3	84.0	86.0	86.7	86.7	86.7	86.7	86.7	87.3
1000	44.7	67.3	72.0	78.7	85.3	87.3	88.0	88.0	88.0	88.0	88.0	88.7
900	44.7	68.0	72.7	79.3	86.0	88.0	89.3	89.3	89.3	89.3	89.3	90.0
800	44.7	68.7	74.0	80.7	87.3	89.3	90.7	90.7	90.7	90.7	90.7	91.3
700	44.7	68.7	74.0	80.7	87.3	90.0	91.3	91.3	91.3	91.3	91.3	92.0
600	44.7	68.7	74.0	80.7	87.3	90.0	91.3	91.3	91.3	91.3	91.3	92.0
500	44.7	68.7	74.7	81.3	88.0	90.7	92.0	92.0	92.0	92.0	92.0	92.7
400	44.7	68.7	74.7	82.0	89.3	92.0	94.7	94.7	94.7	94.7	94.7	95.3
300	44.7	68.7	74.7	82.0	89.3	92.0	94.7	94.7	94.7	94.7	94.7	95.3
200	44.7	68.7	74.7	82.0	90.0	92.7	94.7	94.7	94.7	94.7	94.7	95.3
100	44.7	68.7	74.7	82.0	90.0	92.7	94.7	94.7	94.7	94.7	94.7	95.3
0	44.7	68.7	74.7	82.0	90.0	92.7	94.7	94.7	94.7	94.7	94.7	95.3

TOTAL NUMBER OF OBSERVATIONS

150

CEILING VERSUS VISIBILITY

22239 STATION
 ALAMEDA, CALIFORNIA
 73-77 YEARS
 NDV MONTH
 10 HOURS (L.S.T.)

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16
NO CEILING	30.0	43.3	50.7	56.0	58.7	58.7	59.3	59.3	60.7	60.7	60.7	60.7
≥ 20000	32.7	46.0	53.3	59.3	62.0	62.0	62.7	63.3	64.7	64.7	64.7	64.7
≥ 18000	32.7	46.0	54.0	60.0	62.7	62.7	63.3	64.0	65.3	65.3	65.3	65.3
≥ 16000	33.3	47.3	54.7	60.7	63.3	63.3	64.0	64.7	66.0	66.0	66.0	66.0
≥ 14000	34.0	48.7	56.0	62.0	64.7	64.7	65.3	66.0	67.3	67.3	67.3	67.3
≥ 12000	35.3	50.0	58.0	64.7	67.3	67.3	68.0	68.7	70.0	70.0	70.0	70.0
≥ 10000	37.3	52.7	60.7	67.3	70.0	70.0	70.7	71.3	72.7	72.7	72.7	72.7
≥ 9000	37.3	52.7	60.7	67.3	70.0	70.0	70.7	71.3	72.7	72.7	72.7	72.7
≥ 8000	37.3	52.7	60.7	67.3	70.7	70.7	71.3	72.0	73.3	73.3	73.3	73.3
≥ 7000	38.0	53.3	61.3	68.0	71.3	71.3	72.0	72.7	74.0	74.0	74.0	74.0
≥ 6000	38.0	54.0	62.0	68.7	72.0	72.0	72.7	73.3	74.7	74.7	74.7	74.7
≥ 5000	38.0	54.0	62.0	68.7	72.0	72.0	72.7	73.3	74.7	74.7	74.7	74.7
≥ 4500	38.7	54.7	62.7	69.3	72.7	72.7	73.3	74.0	75.3	75.3	75.3	75.3
≥ 4000	38.7	54.7	62.7	69.3	72.7	72.7	73.3	74.0	75.3	75.3	75.3	75.3
≥ 3500	39.3	56.0	64.0	70.7	74.7	74.7	75.3	76.0	77.3	77.3	77.3	77.3
≥ 3000	41.3	58.7	67.3	74.0	78.0	78.0	78.7	79.3	80.7	80.7	80.7	80.7
≥ 2500	41.3	61.3	70.0	76.7	80.7	80.7	81.3	82.0	83.3	83.3	83.3	83.3
≥ 2000	44.0	64.0	72.7	79.3	83.3	83.3	84.0	84.7	86.0	86.0	86.0	86.0
≥ 1800	44.0	64.0	72.7	79.3	83.3	83.3	84.0	84.7	86.0	86.0	86.0	86.0
≥ 1500	44.0	64.0	73.3	80.7	85.3	85.3	86.7	87.3	88.7	88.7	88.7	88.7
≥ 1200	44.7	66.0	76.0	84.0	88.7	88.7	90.0	90.7	92.0	92.0	92.0	92.0
≥ 1000	44.7	66.7	76.7	84.7	90.0	90.0	91.3	92.0	93.3	93.3	93.3	93.3
≥ 900	44.7	66.7	76.7	84.7	90.0	90.0	91.3	92.7	93.3	94.7	94.7	94.7
≥ 800	44.7	66.7	76.7	84.7	90.0	90.0	91.3	92.7	93.3	94.7	94.7	94.7
≥ 700	44.7	66.7	76.7	84.7	90.0	90.0	91.3	92.7	93.3	94.7	94.7	94.7
≥ 600	44.7	66.7	76.7	84.7	90.0	90.0	91.3	92.7	93.3	94.7	94.7	94.7
≥ 500	44.7	66.7	76.7	84.7	90.0	90.0	91.3	92.7	93.3	94.7	94.7	94.7
≥ 400	44.7	66.7	76.7	84.7	90.0	90.0	91.3	92.7	93.3	94.7	94.7	94.7
≥ 300	44.7	66.7	76.7	84.7	90.7	90.7	92.7	93.3	94.7	94.7	94.7	94.7
≥ 200	44.7	66.7	76.7	84.7	90.7	90.7	92.7	93.3	94.7	94.7	94.7	94.7
≥ 100	44.7	66.7	76.7	84.7	90.7	90.7	92.7	93.3	94.7	94.7	94.7	94.7
0	44.7	66.7	76.7	84.7	90.7	90.7	92.7	93.3	94.7	94.7	94.7	94.7

TOTAL NUMBER OF OBSERVATIONS 150

CEILING VERSUS VISIBILITY

NOV
MONTH

YEARS

74-77

ALAMEDA, CALIFORNIA
STATION NAME

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

HOURS (P. Y.)

12

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	35.3	48.7	57.3	58.7	62.7	64.0	65.3	65.3	65.3	65.3	65.3	66.0	66.0
≥ 20000	38.0	54.7	64.0	65.3	70.0	71.3	72.7	72.7	72.7	72.7	72.7	73.3	73.3
18000	38.7	55.3	64.7	66.0	70.7	72.0	73.3	73.3	73.3	73.3	73.3	74.0	74.0
16000	38.7	56.0	65.3	66.7	71.3	72.7	74.0	74.0	74.0	74.0	74.0	74.7	74.7
14000	40.7	58.0	67.3	69.3	74.7	76.0	77.3	77.3	77.3	77.3	77.3	78.0	78.0
12000	40.7	60.0	69.3	71.3	76.7	78.0	79.3	79.3	79.3	79.3	79.3	80.0	80.0
10000	40.7	60.7	70.0	72.0	77.3	78.7	80.0	80.0	80.0	80.0	80.0	80.7	80.7
9000	40.7	60.7	70.0	72.0	77.3	78.7	80.0	80.0	80.0	80.0	80.0	80.7	80.7
8000	42.0	62.0	71.3	74.0	79.3	80.7	82.0	82.0	82.0	82.0	82.0	82.7	82.7
7000	42.7	62.7	72.0	74.7	80.0	81.3	82.7	82.7	82.7	82.7	82.7	83.3	83.3
6000	42.7	63.3	72.7	75.3	80.7	82.0	83.3	83.3	83.3	83.3	83.3	84.0	84.0
5000	42.7	63.3	72.7	75.3	80.7	82.0	83.3	83.3	83.3	83.3	83.3	84.0	84.0
4500	44.0	64.7	74.0	76.7	82.0	83.3	84.7	84.7	84.7	84.7	84.7	85.3	85.3
4000	44.0	65.3	74.7	77.3	82.7	84.0	85.3	85.3	85.3	85.3	85.3	86.0	86.0
3500	44.0	66.0	75.3	78.0	83.3	84.7	86.0	86.0	86.0	86.0	86.0	86.7	86.7
3000	45.3	68.0	77.3	80.0	85.3	86.7	88.0	88.0	88.0	88.0	88.0	88.7	88.7
2500	46.7	70.7	80.0	82.7	88.0	89.3	90.7	90.7	90.7	90.7	90.7	91.3	91.3
2000	46.7	71.3	80.7	83.3	88.7	90.0	91.3	91.3	91.3	91.3	91.3	92.0	92.0
1800	46.7	71.3	80.7	83.3	88.7	90.7	92.0	92.0	92.0	92.0	92.0	92.7	92.7
1500	47.3	72.7	82.0	84.7	90.0	92.0	93.3	93.3	93.3	93.3	93.3	94.0	94.0
1200	47.3	74.0	83.3	86.7	92.0	94.0	96.0	96.0	96.0	96.0	96.0	96.7	96.7
1000	48.0	74.7	84.7	88.0	93.3	95.3	97.3	97.3	97.3	97.3	97.3	98.0	98.0
900	48.0	75.3	85.3	88.7	94.0	96.0	98.0	98.0	98.0	98.0	98.0	98.7	98.7
800	48.0	75.3	85.3	88.7	94.0	96.0	98.0	98.0	98.0	98.0	98.0	98.7	98.7
700	48.0	75.3	85.3	88.7	94.0	96.0	98.0	98.0	98.0	98.0	98.0	98.7	98.7
600	48.0	75.3	85.3	88.7	94.0	96.0	98.0	98.0	98.0	98.0	98.0	98.7	98.7
500	48.0	75.3	85.3	88.7	94.0	96.0	98.0	98.0	98.0	98.0	98.0	98.7	98.7
400	48.0	75.3	85.3	88.7	94.0	96.0	98.0	98.0	98.0	98.0	98.0	98.7	98.7
300	48.0	75.3	85.3	88.7	94.0	96.0	98.0	98.0	98.0	98.0	98.0	98.7	98.7
200	48.0	75.3	85.3	88.7	94.0	96.0	98.0	98.0	98.0	98.0	98.0	98.7	98.7
100	48.0	75.3	85.3	88.7	94.0	96.0	98.0	98.0	98.0	98.0	98.0	98.7	98.7
0	48.0	75.3	85.3	88.7	94.0	96.0	98.0	98.0	98.0	98.0	98.0	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

150

CEILING VERSUS VISIBILITY

NOV
MONTH

YEARS

73-77

ALAMEDA, CALIFORNIA
STATION NAME

23239
STATION

16
HOURS (P.S.T.)

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	34.7	52.7	57.3	63.3	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
AI 20000	38.0	58.7	64.7	71.3	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
AI 18000	38.0	60.0	66.0	72.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
AI 16000	38.0	60.0	66.0	72.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
AI 14000	38.0	60.7	67.3	74.0	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
AI 12000	39.3	62.0	68.7	75.3	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
AI 10000	40.0	62.7	69.3	76.0	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
AI 9000	41.3	64.0	70.7	77.3	78.7	78.7	79.3	79.3	79.3	79.3	79.3	79.3	79.3
AI 8000	43.3	66.0	72.7	80.0	81.3	81.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0
AI 7000	44.0	66.7	73.3	80.7	82.0	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7
AI 6000	44.0	66.7	73.3	80.7	82.0	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7
AI 5000	44.7	68.7	75.3	82.7	84.0	84.0	84.7	84.7	84.7	84.7	84.7	84.7	84.7
AI 4500	44.7	69.3	76.0	83.3	84.7	84.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3
AI 4000	44.7	70.0	76.7	84.0	85.3	85.3	86.0	86.0	86.0	86.0	86.0	86.0	86.0
AI 3500	44.7	70.0	76.7	84.0	85.3	85.3	86.0	86.0	86.0	86.0	86.0	86.0	86.0
AI 3000	45.3	72.7	79.3	86.7	88.0	88.0	88.7	88.7	88.7	88.7	88.7	88.7	88.7
AI 2500	45.3	73.3	80.0	88.0	89.3	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0
AI 2000	46.7	75.3	82.0	90.0	91.3	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0
AI 1800	47.3	76.7	83.3	91.3	92.7	92.7	93.3	93.3	93.3	93.3	93.3	93.3	93.3
AI 1500	48.7	79.3	86.0	94.7	96.0	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7
AI 1200	49.3	80.0	86.7	96.0	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
AI 1000	49.3	80.7	87.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 900	49.3	80.7	87.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 800	49.3	80.7	87.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 700	49.3	80.7	87.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 600	49.3	80.7	87.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 500	49.3	80.7	87.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 400	49.3	80.7	87.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 300	49.3	80.7	87.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 200	49.3	80.7	87.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 100	49.3	80.7	87.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
AI 0	49.3	80.7	87.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS 150

NAVWEASERVCOM

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

CEILING VERSUS VISIBILITY

23230
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

NOV
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

19
HOURS (L.S.T.)

3031

MMH

5703 CEILING VERSUS VISIBILITY JAN 68

MMH

CEILING (FEET)		VISIBILITY (STATUTE MILES)														
		≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING		44.0	69.3	70.0	70.7	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 20000		44.7	71.3	72.7	73.3	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
18000	AI AI	44.7	71.3	72.7	73.3	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
16000		44.7	71.3	72.7	73.3	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
14000	AI AI	45.3	72.7	74.0	74.7	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
12000		46.0	74.7	76.0	76.7	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
10000	AI AI	47.3	76.0	77.3	78.0	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
9000		47.3	76.0	77.3	78.0	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
8000	AI AI	48.7	77.3	78.7	79.3	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
7000		48.7	77.3	78.7	79.3	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
6000	AI AI	49.3	78.7	80.0	80.7	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
5000		50.7	81.3	82.7	83.3	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
4500	AI AI	50.7	81.3	82.7	83.3	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
4000		51.3	82.0	83.3	84.0	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
3500	AI AI	51.3	82.7	84.0	84.7	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
3000		53.3	85.3	86.7	87.3	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
2500	AI AI	53.3	85.3	86.7	87.3	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
2000		56.0	88.0	89.3	90.0	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
1800	AI AI	56.7	89.3	90.7	91.3	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
1500		56.7	90.0	91.3	92.3	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
1200	AI AI	56.7	92.0	93.3	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
1000		56.7	92.7	94.0	96.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
900	AI AI	56.7	93.3	94.7	96.7	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
800		56.7	94.0	95.3	97.3	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
700	AI AI	56.7	94.0	95.3	97.3	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
600		56.7	94.0	95.3	97.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
500	AI AI	56.7	94.0	95.3	97.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
400		56.7	94.0	95.3	97.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
300	AI AI	56.7	94.0	95.3	97.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
200		56.7	94.0	95.3	97.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
100	AI AI	56.7	94.0	95.3	97.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
0		56.7	94.0	95.3	97.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

150

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239 STATION
 ALAMEDA, CALIFORNIA
 73-77 YEARS
 NOV NORTH
 22 HOURS (L.S.T.)

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	48.0	66.0	68.0	69.3	69.3	69.3	70.0	70.0	70.0	70.0	70.0	70.0	70.0
≥ 20000	48.7	68.7	71.3	72.7	72.7	72.7	73.3	73.3	73.3	73.3	73.3	73.3	73.3
18000	48.7	68.7	71.3	72.7	72.7	72.7	73.3	73.3	73.3	73.3	73.3	73.3	73.3
16000	48.7	68.7	71.3	72.7	72.7	72.7	73.3	73.3	73.3	73.3	73.3	73.3	73.3
14000	50.0	70.7	73.3	74.7	74.7	74.7	75.3	75.3	75.3	75.3	75.3	75.3	75.3
12000	50.7	71.3	74.0	75.3	75.3	75.3	76.0	76.0	76.0	76.0	76.0	76.0	76.0
10000	51.3	72.7	75.3	76.7	76.7	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3
9000	51.3	72.7	75.3	76.7	76.7	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3
8000	52.7	74.7	77.3	78.7	78.7	78.7	79.3	79.3	79.3	79.3	79.3	79.3	79.3
7000	53.3	75.3	78.0	79.3	79.3	79.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0
6000	53.3	75.3	78.0	79.3	79.3	79.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0
5000	54.7	77.3	80.0	82.0	82.0	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7
4500	56.0	78.7	81.3	83.3	83.3	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0
4000	56.0	79.3	82.0	84.0	84.0	84.0	84.7	84.7	84.7	84.7	84.7	84.7	84.7
3500	56.7	80.7	83.3	85.3	85.3	85.3	86.0	86.0	86.0	86.0	86.0	86.0	86.0
3000	56.7	80.7	83.3	85.3	85.3	85.3	86.0	86.0	86.0	86.0	86.0	86.0	86.0
2500	57.3	82.0	84.7	86.7	86.7	86.7	87.3	87.3	87.3	87.3	87.3	87.3	87.3
2000	58.7	84.7	87.3	89.3	89.3	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0
1800	58.7	85.3	88.0	90.0	90.0	90.0	90.7	90.7	90.7	90.7	90.7	90.7	90.7
1500	59.3	87.3	90.0	92.7	93.3	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0
1200	60.7	89.3	92.7	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3
1000	60.7	89.3	92.7	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3
900	60.7	89.3	92.7	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3
800	60.7	89.3	92.7	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3
700	60.7	89.3	92.7	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3
600	60.7	90.0	93.3	96.7	97.3	97.3	98.7	98.7	98.7	98.7	98.7	98.7	98.7
500	60.7	90.0	93.3	96.7	97.3	97.3	98.7	98.7	98.7	98.7	98.7	98.7	98.7
400	60.7	90.0	93.3	97.3	98.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3
300	60.7	90.0	93.3	97.3	98.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3
200	60.7	90.0	93.3	97.3	98.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	60.7	90.0	93.3	97.3	98.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	60.7	90.0	93.3	97.3	98.0	98.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 150

CEILING VERSUS VISIBILITY

33239 STATION

ALAMEDA, CALIFORNIA

STATION NAME

73-77

YEARS

NOV

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL

HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)													≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	37.5	54.0	58.3	61.4	63.6	64.0	64.5	64.5	64.7	64.7	64.7	64.7	64.7	64.8
≥ 20000	39.0	57.7	62.5	65.9	68.2	68.6	69.1	69.2	69.3	69.3	69.3	69.3	69.3	69.4
18000	39.1	58.0	62.8	66.3	68.5	68.9	69.4	69.5	69.7	69.7	69.7	69.7	69.7	69.8
16000	39.2	58.2	63.0	66.4	68.7	69.1	69.6	69.7	69.8	69.8	69.8	69.8	69.8	69.9
14000	39.3	59.3	64.3	67.8	70.2	70.6	71.1	71.2	71.3	71.3	71.3	71.3	71.4	71.4
12000	40.8	60.9	65.9	69.7	72.0	72.4	72.9	73.0	73.2	73.2	73.2	73.2	73.3	73.3
10000	41.8	62.5	67.5	71.3	73.7	74.1	74.6	74.7	74.8	74.8	74.8	74.8	74.9	74.9
9000	42.0	62.7	67.7	71.4	73.8	74.3	74.8	74.9	75.1	75.1	75.1	75.1	75.2	75.2
8000	43.3	64.2	69.2	73.1	75.7	76.1	76.7	76.8	76.9	76.9	76.9	76.9	77.0	77.1
7000	43.7	64.7	69.7	73.6	76.2	76.6	77.2	77.3	77.4	77.4	77.4	77.4	77.5	77.6
6000	44.0	65.3	70.3	74.3	76.8	77.3	77.8	77.9	78.1	78.1	78.1	78.1	78.2	78.3
5000	44.6	66.3	71.3	75.3	78.0	78.5	79.1	79.2	79.3	79.3	79.3	79.3	79.4	79.5
4500	45.3	67.1	72.1	76.1	78.8	79.3	79.8	79.9	80.1	80.1	80.1	80.1	80.2	80.3
4000	45.4	67.5	72.5	76.6	79.3	79.8	80.3	80.4	80.6	80.6	80.6	80.6	80.7	80.8
3500	46.0	68.5	73.5	77.6	80.3	80.8	81.4	81.5	81.7	81.7	81.7	81.7	81.8	81.8
3000	47.2	70.5	75.6	79.7	82.4	82.9	83.5	83.6	83.8	83.8	83.8	83.8	83.8	83.9
2500	47.9	72.0	77.2	81.4	84.2	84.7	85.3	85.3	85.5	85.5	85.5	85.5	85.6	85.7
2000	49.1	74.2	79.3	83.7	86.4	86.9	87.6	87.7	87.8	87.8	87.8	87.8	87.9	88.0
1800	49.3	74.8	80.0	84.3	87.1	87.7	88.3	88.4	88.6	88.6	88.6	88.6	88.7	88.8
1500	50.0	76.1	81.3	86.2	89.3	90.0	90.8	90.8	91.0	91.0	91.0	91.0	91.1	91.2
1200	51.0	77.9	83.3	88.5	91.8	92.4	93.3	93.3	93.5	93.5	93.5	93.5	93.6	93.7
1000	51.3	78.7	84.2	89.3	92.7	93.3	94.2	94.3	94.4	94.4	94.4	94.4	94.5	94.6
900	51.3	79.1	84.6	89.8	93.1	93.9	94.8	94.9	95.1	95.1	95.1	95.1	95.2	95.3
800	51.3	79.3	84.9	90.1	93.4	94.2	95.2	95.3	95.4	95.4	95.4	95.4	95.5	95.6
700	51.3	79.5	85.1	90.3	93.7	94.6	95.5	95.6	95.8	95.8	95.8	95.8	95.8	95.9
600	51.3	79.8	85.4	90.6	94.2	95.1	96.1	96.2	96.4	96.4	96.4	96.4	96.5	96.6
500	51.3	79.8	85.5	90.7	94.3	95.3	96.3	96.5	96.8	96.9	97.0	97.0	97.1	97.2
400	51.3	79.9	85.7	91.2	95.0	96.0	97.3	97.6	97.8	98.2	98.3	98.4	98.5	98.6
300	51.3	79.9	85.7	91.2	95.2	96.2	97.5	97.8	98.1	98.8	98.9	99.0	99.1	99.2
200	51.3	79.9	85.7	91.2	95.3	96.3	97.7	98.0	98.3	98.9	99.1	99.2	99.3	99.3
100	51.3	79.9	85.7	91.2	95.3	96.3	97.7	98.0	98.3	98.9	99.1	99.2	99.3	99.3
0	51.3	79.9	85.7	91.2	95.3	96.3	97.7	98.0	98.3	98.9	99.1	99.2	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

1200

NAVWEASERVCOM

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

MMR

MMR

3029

CEILING VERSUS VISIBILITY

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

01
HOURS (P. M. T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	21.3	36.1	43.2	51.0	54.2	54.8	56.8	57.4	57.4	57.4	57.4	57.4	57.4
≥ 20000	23.2	38.7	45.8	53.6	56.8	57.4	59.4	60.0	60.0	60.0	60.0	60.0	60.0
18000	23.9	39.4	46.5	54.2	57.4	58.1	60.0	60.7	60.7	60.7	60.7	60.7	60.7
16000	23.9	39.4	46.5	54.2	57.4	58.1	60.0	60.7	60.7	60.7	60.7	60.7	60.7
14000	23.9	39.4	46.5	54.2	57.4	58.1	60.0	60.7	60.7	60.7	60.7	60.7	60.7
12000	25.8	41.9	49.0	58.1	61.9	62.6	64.5	65.2	65.2	65.2	65.2	65.2	65.2
10000	25.8	42.6	49.7	58.7	62.6	63.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8
9000	25.8	42.6	49.7	58.7	62.6	63.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8
8000	27.1	45.2	52.3	61.3	65.2	65.8	67.7	68.4	68.4	69.0	69.0	69.0	69.0
7000	27.1	45.8	52.9	61.9	65.8	66.5	68.4	69.0	69.0	69.7	69.7	69.7	69.7
6000	27.1	45.8	52.9	61.9	65.8	66.5	68.4	69.0	69.0	69.7	69.7	69.7	69.7
5000	27.1	45.8	52.9	61.9	65.8	66.5	68.4	69.0	69.0	69.7	69.7	69.7	69.7
4500	29.7	48.4	55.5	64.5	68.4	69.0	71.0	71.6	71.6	72.3	72.3	72.3	72.3
4000	29.7	48.4	55.5	64.5	68.4	69.0	71.0	71.6	71.6	72.3	72.3	72.3	72.3
3500	29.7	49.0	56.1	65.2	69.0	69.7	71.6	72.9	72.9	73.6	73.6	73.6	73.6
3000	31.0	51.0	58.1	67.1	71.0	71.6	73.6	74.8	74.8	75.5	75.5	75.5	75.5
2500	31.6	51.6	58.7	67.7	71.6	72.3	74.2	75.5	75.5	76.1	76.1	76.1	76.1
2000	32.3	53.6	60.7	69.7	73.6	74.2	76.1	77.4	77.4	78.1	78.1	78.1	78.1
1800	32.3	54.2	61.3	70.3	74.2	75.5	77.4	78.7	78.7	79.4	79.4	79.4	79.4
1500	32.9	54.8	61.9	71.6	76.1	77.4	79.4	80.7	80.7	81.3	81.3	81.3	81.3
1200	32.9	55.5	62.6	72.3	76.8	78.1	80.0	81.3	81.3	81.9	81.9	81.9	81.9
1000	32.9	56.8	64.5	76.1	80.7	81.9	83.9	85.2	85.2	85.8	85.8	85.8	85.8
900	32.9	57.4	65.2	76.8	81.3	82.6	84.5	85.8	85.8	86.5	86.5	86.5	86.5
800	32.9	57.4	65.2	76.8	81.3	82.6	84.5	85.8	85.8	86.5	86.5	86.5	86.5
700	32.9	59.4	67.1	78.7	83.2	84.5	86.5	87.7	87.7	88.4	88.4	88.4	88.4
600	32.9	59.4	67.7	80.0	85.8	87.1	89.0	90.3	90.3	91.0	91.0	91.0	91.0
500	32.9	59.4	67.7	80.7	86.5	87.7	89.7	91.0	91.0	91.6	91.6	91.6	91.6
400	32.9	59.4	67.7	80.7	86.5	87.7	89.7	91.6	91.6	92.3	92.3	92.3	92.3
300	32.9	59.4	67.7	81.3	87.1	88.4	90.3	92.3	92.3	93.6	93.6	93.6	93.6
200	32.9	59.4	67.7	81.3	87.1	88.4	90.3	92.3	92.3	93.6	93.6	93.6	93.6
100	32.9	59.4	67.7	81.3	87.1	89.0	91.0	92.9	92.9	94.2	94.2	94.2	94.2
0	32.9	59.4	67.7	81.3	87.1	89.0	91.0	92.9	92.9	94.2	94.2	94.2	94.2

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

33239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

07
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	19.4	32.3	34.8	43.9	48.4	51.0	54.8	54.8	54.8	56.1	56.1	56.1
≥ 20000	20.7	33.6	36.1	45.2	49.7	52.9	56.8	56.8	56.8	58.1	58.1	58.1
≥ 18000	20.7	33.6	36.1	45.2	49.7	52.9	56.8	56.8	56.8	58.1	58.1	58.1
≥ 16000	20.7	33.6	36.1	45.2	49.7	52.9	56.8	56.8	56.8	58.1	58.1	58.1
≥ 14000	20.7	35.5	38.1	47.1	51.6	54.8	58.7	58.7	58.7	60.0	60.0	60.0
≥ 12000	23.9	38.7	41.3	50.3	54.8	58.7	62.6	63.2	63.2	64.5	64.5	64.5
≥ 10000	23.9	39.4	41.9	51.0	56.1	60.0	63.9	64.5	64.5	65.8	65.8	65.8
≥ 9000	23.9	39.4	41.9	51.0	56.1	60.0	63.9	64.5	64.5	65.8	65.8	65.8
≥ 8000	24.5	40.7	43.2	52.9	58.1	61.9	65.8	67.1	67.1	68.4	68.4	68.4
≥ 7000	25.2	41.3	43.9	53.6	58.7	62.6	66.5	67.7	67.7	69.0	69.0	69.0
≥ 6000	25.8	42.6	45.2	54.8	60.0	63.9	67.7	69.0	69.0	70.3	70.3	70.3
≥ 5000	25.8	42.6	45.2	54.8	60.0	63.9	67.7	69.0	69.0	70.3	70.3	70.3
≥ 4500	25.8	44.5	47.1	56.8	61.9	65.8	69.7	71.0	71.0	72.3	72.3	72.3
≥ 4000	25.8	44.5	47.1	56.8	61.9	65.8	69.7	71.0	71.0	72.3	72.3	72.3
≥ 3500	25.8	44.5	47.1	56.8	61.9	65.8	69.7	71.0	71.0	72.3	72.3	72.3
≥ 3000	25.8	45.2	47.7	57.4	62.6	66.5	70.3	71.6	71.6	72.9	72.9	72.9
≥ 2500	27.1	47.7	50.3	60.0	65.2	69.0	72.9	74.2	74.2	75.5	75.5	75.5
≥ 2000	27.7	49.0	51.6	61.3	66.5	70.3	74.2	75.5	75.5	76.8	76.8	76.8
≥ 1800	27.7	49.0	51.6	61.3	66.5	70.3	74.2	75.5	75.5	76.8	76.8	76.8
≥ 1500	27.7	51.0	53.6	63.2	68.4	72.3	76.1	77.4	77.4	78.7	78.7	78.7
≥ 1200	27.7	51.6	54.2	63.9	69.0	72.9	76.8	78.1	78.1	79.4	79.4	79.4
≥ 1000	27.7	51.6	54.2	63.9	69.0	72.9	76.8	78.1	78.1	79.4	79.4	79.4
≥ 900	27.7	51.6	54.8	65.8	71.6	75.5	79.4	80.7	80.7	81.9	81.9	81.9
≥ 800	27.7	51.6	55.5	66.5	72.3	76.1	80.0	81.3	81.3	82.6	82.6	82.6
≥ 700	27.7	52.3	56.1	67.7	73.6	77.4	81.9	83.9	83.9	85.2	85.2	85.2
≥ 600	27.7	53.6	57.4	69.7	76.8	80.7	85.2	87.1	87.1	88.4	88.4	88.4
≥ 500	27.7	53.6	57.4	71.0	78.1	81.9	86.5	89.0	89.0	90.3	90.3	90.3
≥ 400	27.7	53.6	57.4	71.0	78.1	81.9	86.5	89.0	89.0	90.3	90.3	90.3
≥ 300	27.7	53.6	58.1	71.6	78.7	82.6	87.7	90.3	90.3	92.9	92.9	92.9
≥ 200	27.7	53.6	58.1	71.6	78.7	82.6	87.7	90.3	90.3	92.9	92.9	92.9
≥ 100	27.7	53.6	58.1	71.6	78.7	82.6	87.7	90.3	90.3	92.9	92.9	92.9
0	27.7	53.6	58.1	71.6	78.7	82.6	87.7	90.3	90.3	92.9	92.9	92.9

TOTAL NUMBER OF OBSERVATIONS

155

CEILING VERSUS VISIBILITY

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

10
HOURS (P.M.T.)

3025

MMRR

5703 CEILING VERSUS VISIBILITY JAN 68

MMR

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	14.2	25.2	29.7	32.3	35.4	42.6	43.9	45.2	45.2	46.5	47.1	47.1	47.7
≥ 20000	15.5	29.0	33.6	36.8	43.9	47.7	51.6	52.9	52.9	54.8	55.5	55.5	56.1
AI 18000	16.1	29.7	34.2	37.4	44.5	48.4	52.3	53.6	53.6	55.5	56.1	56.1	56.8
AI 14000	16.1	29.7	34.2	37.4	44.5	48.4	52.3	53.6	53.6	55.5	56.1	56.1	56.8
AI 14000	16.8	31.6	36.1	40.0	47.1	51.0	54.8	56.1	56.1	58.1	58.7	58.7	59.4
AI 12000	16.8	32.3	36.8	40.7	47.7	51.6	55.5	56.8	56.8	58.7	59.4	59.4	60.0
AI 10000	20.0	36.1	40.7	44.5	52.3	56.8	60.7	61.9	61.9	63.9	64.5	64.5	65.2
AI 9000	20.0	36.1	40.7	44.5	52.3	56.8	60.7	61.9	61.9	63.9	64.5	64.5	65.2
AI 8000	21.3	37.4	41.9	45.8	53.6	58.1	61.9	63.2	63.2	65.2	65.8	65.8	66.5
AI 7000	22.6	38.7	43.2	47.1	54.8	59.4	63.2	64.5	64.5	66.5	67.1	67.1	67.7
AI 6000	23.2	39.4	43.9	47.7	55.5	60.0	63.9	65.2	65.2	67.1	67.7	67.7	68.4
AI 5000	23.9	41.3	45.8	49.7	57.4	61.9	65.8	67.1	67.1	69.0	69.7	69.7	70.3
AI 4500	24.5	42.6	47.1	51.0	58.7	63.2	67.1	68.4	68.4	70.3	71.0	71.0	71.6
AI 4000	24.5	42.6	47.1	51.0	58.7	63.2	67.1	68.4	68.4	70.3	71.0	71.0	71.6
AI 3500	24.5	42.6	47.1	51.0	58.7	63.2	67.1	68.4	68.4	70.3	71.0	71.0	71.6
AI 3000	24.5	42.6	47.1	51.0	58.7	63.2	67.1	68.4	68.4	70.3	71.0	71.0	71.6
AI 2500	25.2	43.9	49.0	53.6	61.9	66.5	70.3	72.3	72.3	74.2	74.8	74.8	75.5
AI 2000	25.8	44.5	49.7	54.2	62.6	67.1	71.0	72.9	72.9	74.8	75.5	75.5	76.1
AI 1800	25.8	45.2	50.3	54.8	63.9	68.4	72.3	74.2	74.2	76.1	76.8	76.8	77.4
AI 1500	25.8	47.1	52.9	57.4	66.5	71.0	74.8	77.4	77.4	79.4	80.0	80.0	80.7
AI 1200	25.8	49.7	55.5	60.0	69.0	73.6	77.4	80.0	80.0	81.9	82.6	82.6	83.2
AI 1000	25.8	50.3	56.1	60.7	69.7	74.2	78.1	80.7	80.7	82.6	83.2	83.2	83.9
AI 900	25.8	50.3	56.1	60.7	69.7	74.2	78.1	80.7	80.7	82.6	83.2	83.2	83.9
AI 800	25.8	50.3	56.1	60.7	69.7	74.2	78.1	80.7	80.7	82.6	83.2	83.2	83.9
AI 700	25.8	51.0	56.8	61.3	70.3	74.8	80.7	83.9	83.9	85.8	85.8	85.8	86.5
AI 600	25.8	51.0	56.8	61.3	70.3	74.8	80.7	83.9	83.9	85.8	85.8	85.8	86.5
AI 500	25.8	51.0	56.8	61.3	70.3	74.8	80.7	83.9	83.9	85.8	85.8	85.8	86.5
AI 400	25.8	51.0	56.8	61.3	70.3	74.8	80.7	83.9	83.9	85.8	85.8	85.8	86.5
AI 300	25.8	51.0	56.8	61.3	70.3	74.8	80.7	83.9	83.9	85.8	85.8	85.8	86.5
AI 200	25.8	51.0	56.8	61.3	70.3	74.8	80.7	83.9	83.9	85.8	85.8	85.8	86.5
AI 100	25.8	51.0	56.8	61.3	70.3	74.8	80.7	83.9	83.9	85.8	85.8	85.8	86.5
AI 0	25.8	51.0	56.8	61.3	70.3	74.8	80.7	83.9	83.9	85.8	85.8	85.8	86.5

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

13
HOURS (L.S.T.)

CEILING (FEET)		VISIBILITY (STATUTE MILES)														
		≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING		21.9	32.3	36.8	42.6	50.3	55.5	61.3	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 20000		22.6	32.9	38.1	45.2	52.9	59.4	65.2	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
AI 18000		22.6	33.6	38.7	45.8	53.6	60.0	65.8	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
AI 16000		22.6	33.6	38.7	45.8	53.6	60.0	65.8	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
AI 14000		23.2	34.8	41.3	48.4	56.1	62.6	68.4	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
AI 12000		23.2	34.8	41.3	48.4	56.8	63.2	69.0	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
AI 10000		23.9	36.1	42.6	50.3	59.4	65.8	71.6	72.9	73.6	73.6	73.6	73.6	73.6	73.6	73.6
AI 9000		23.9	36.8	43.2	51.0	60.0	66.5	72.3	73.6	74.2	74.2	74.2	74.2	74.2	74.2	74.2
AI 8000		24.5	40.0	46.5	54.2	63.2	69.7	75.5	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4
AI 7000		24.5	40.0	46.5	54.2	63.2	69.7	75.5	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4
AI 6000		24.5	40.0	46.5	54.2	63.2	69.7	75.5	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4
AI 5000		25.2	41.3	47.7	55.5	64.5	71.0	76.8	78.1	78.7	78.7	78.7	78.7	78.7	78.7	78.7
AI 4500		25.8	42.6	49.7	57.4	66.5	72.9	78.7	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7
AI 4000		26.5	43.2	50.3	58.1	67.1	73.6	79.4	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3
AI 3500		26.5	43.2	50.3	58.1	67.7	74.2	80.0	81.3	81.9	81.9	81.9	81.9	81.9	81.9	81.9
AI 3000		26.5	44.5	51.6	59.4	69.0	75.5	81.9	83.2	83.9	83.9	83.9	83.9	83.9	83.9	83.9
AI 2500		27.1	45.8	52.9	60.7	70.3	76.8	83.2	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2
AI 2000		27.7	47.1	54.2	62.6	72.3	78.7	85.2	86.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1
AI 1800		27.7	47.1	54.2	62.6	72.3	78.7	85.2	86.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1
AI 1500		27.7	48.4	55.5	63.9	74.2	81.3	87.7	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7
AI 1200		27.7	49.7	56.8	65.8	76.8	83.9	90.3	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3
AI 1000		27.7	49.7	57.4	66.5	78.1	85.2	91.6	92.9	93.6	93.6	93.6	93.6	93.6	93.6	93.6
AI 900		27.7	49.7	57.4	66.5	78.1	85.2	91.6	92.9	93.6	93.6	93.6	93.6	93.6	93.6	93.6
AI 800		27.7	49.7	58.1	67.1	78.7	85.8	92.3	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2
AI 700		27.7	49.7	58.1	67.7	79.4	86.5	92.9	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8
AI 600		27.7	49.7	58.1	67.7	79.4	86.5	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5
AI 500		27.7	49.7	58.1	67.7	80.0	87.1	93.6	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4
AI 400		27.7	49.7	58.1	67.7	80.0	87.1	93.6	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4
AI 300		27.7	49.7	58.1	67.7	80.0	87.1	93.6	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4
AI 200		27.7	49.7	58.1	67.7	80.0	87.1	93.6	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4
AI 100		27.7	49.7	58.1	67.7	80.0	87.1	93.6	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4
0		27.7	49.7	58.1	67.7	80.0	87.1	93.6	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

33239 STATION ALAMEDA, CALIFORNIA

73-77

YEARS

DEC MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

16 HOURS (L.S.T.)

3023

RRR

5703 CEILING VERSUS VISIBILITY JAN 68

RRR

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	24.5	44.5	51.6	55.5	58.7	61.9	63.2	63.2	63.2	63.2	63.9	63.9	63.9	63.9	63.9
≥ 20000	25.2	45.8	52.9	59.4	62.6	66.5	67.7	67.7	67.7	68.4	69.0	69.0	69.0	69.0	69.0
AI 18000	25.2	45.8	52.9	59.4	62.6	66.5	67.7	67.7	67.7	68.4	69.0	69.0	69.0	69.0	69.0
AI 16000	25.2	45.8	52.9	59.4	62.6	66.5	67.7	67.7	67.7	68.4	69.0	69.0	69.0	69.0	69.0
AI 14000	25.8	47.1	54.2	61.3	64.5	68.4	69.7	69.7	69.7	70.3	71.0	71.0	71.0	71.0	71.0
AI 12000	25.8	47.7	54.8	61.9	65.8	69.7	71.6	72.3	72.3	72.9	73.6	73.6	73.6	73.6	73.6
AI 10000	25.8	47.7	55.5	63.2	67.1	71.0	73.6	74.2	74.2	74.8	75.5	75.5	75.5	75.5	75.5
AI 9000	26.5	48.4	56.1	63.9	68.4	72.3	74.8	75.5	75.5	76.1	76.8	76.8	76.8	76.8	76.8
AI 8000	26.5	49.7	57.4	65.8	71.0	74.8	77.4	78.1	78.1	78.7	79.4	79.4	79.4	79.4	79.4
AI 7000	26.5	49.7	57.4	65.8	71.0	74.8	77.4	78.1	78.1	78.7	79.4	79.4	79.4	79.4	79.4
AI 6000	26.5	49.7	57.4	65.8	71.0	74.8	77.4	78.1	78.1	78.7	79.4	79.4	79.4	79.4	79.4
AI 5000	27.1	50.3	58.1	66.5	71.6	75.5	78.1	78.7	78.7	79.4	80.0	80.0	80.0	80.0	80.0
AI 4500	27.1	52.3	60.0	68.4	73.6	77.4	80.0	80.7	80.7	81.3	81.9	81.9	81.9	81.9	81.9
AI 4000	27.7	54.2	61.9	71.0	76.1	80.0	82.6	83.2	83.2	83.9	84.5	84.5	84.5	84.5	84.5
AI 3500	27.7	54.8	62.6	71.6	76.8	80.7	83.2	83.9	83.9	84.5	85.2	85.2	85.2	85.2	85.2
AI 3000	27.7	56.8	64.5	74.2	79.4	83.2	85.8	86.5	86.5	87.1	87.7	87.7	87.7	87.7	87.7
AI 2500	27.7	56.8	64.5	74.2	80.0	83.9	86.5	87.1	87.1	87.7	88.4	88.4	88.4	88.4	88.4
AI 2000	27.7	58.1	65.8	76.1	81.9	85.8	88.4	89.0	89.0	89.7	90.3	90.3	90.3	90.3	90.3
AI 1800	27.7	58.1	65.8	76.1	81.9	85.8	88.4	89.0	89.0	89.7	90.3	90.3	90.3	90.3	90.3
AI 1500	27.7	58.7	66.5	76.8	82.6	87.1	89.7	90.3	90.3	91.0	91.6	91.6	91.6	91.6	91.6
AI 1200	27.7	59.4	67.1	77.4	83.2	87.7	91.0	91.6	91.6	92.3	92.9	92.9	92.9	92.9	92.9
AI 1000	27.7	59.4	67.1	78.1	83.9	88.4	92.3	92.9	92.9	94.2	94.8	94.8	94.8	94.8	94.8
AI 900	27.7	60.0	67.7	78.7	84.5	89.0	92.9	93.6	93.6	94.8	95.5	95.5	95.5	95.5	95.5
AI 800	27.7	60.0	67.7	78.7	84.5	89.0	92.9	93.6	93.6	94.8	95.5	95.5	95.5	95.5	95.5
AI 700	27.7	60.0	67.7	78.7	84.5	89.0	92.9	93.6	93.6	94.8	95.5	95.5	95.5	95.5	95.5
AI 600	27.7	60.0	67.7	78.7	84.5	89.0	92.9	93.6	93.6	94.8	95.5	95.5	95.5	95.5	95.5
AI 500	27.7	60.0	67.7	79.4	85.8	90.3	94.8	95.5	95.5	96.8	97.4	97.4	97.4	97.4	97.4
AI 400	27.7	60.7	68.4	80.0	86.5	91.0	95.5	96.1	96.1	98.1	98.7	98.7	98.7	98.7	98.7
AI 300	27.7	60.7	68.4	80.0	86.5	91.0	95.5	96.1	96.1	98.7	99.4	99.4	99.4	99.4	99.4
AI 200	27.7	60.7	68.4	80.0	86.5	91.0	95.5	96.1	96.1	98.7	99.4	99.4	99.4	99.4	99.4
AI 100	27.7	60.7	68.4	80.0	86.5	91.0	95.5	96.1	96.1	98.7	99.4	99.4	99.4	99.4	99.4
AI 0	27.7	60.7	68.4	80.0	86.5	91.0	95.5	96.1	96.1	98.7	99.4	99.4	99.4	99.4	100.0

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239 STATION ALAMEDA, CALIFORNIA STATION NAME
 73-77 YEARS
 DEC MONTH
 19 HOURS (L.S.T.)
 PERCENTAGE FREQUENCY OF OCCURRENCE
 (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	32.3	58.7	63.2	65.2	65.8	67.1	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 20000	32.9	61.3	65.8	68.4	69.7	71.0	71.6	71.6	71.6	71.6	71.6	71.6	71.6
18000	32.9	61.3	65.8	68.4	69.7	71.0	71.6	71.6	71.6	71.6	71.6	71.6	71.6
16000	32.9	61.3	65.8	68.4	69.7	71.0	71.6	71.6	71.6	71.6	71.6	71.6	71.6
14000	34.2	63.2	67.7	70.3	71.6	72.9	73.6	73.6	73.6	73.6	73.6	73.6	73.6
12000	34.8	64.5	69.0	71.6	72.9	74.2	74.8	74.8	74.8	74.8	74.8	74.8	74.8
10000	35.5	65.2	69.7	72.3	73.6	74.8	76.1	76.1	76.1	76.1	76.1	76.1	76.1
9000	35.5	65.2	69.7	72.3	73.6	74.8	76.1	76.1	76.1	76.1	76.1	76.1	76.1
8000	36.8	67.1	72.3	74.8	76.1	77.4	78.7	78.7	78.7	78.7	78.7	78.7	78.7
7000	36.8	67.1	72.3	74.8	76.1	77.4	78.7	78.7	78.7	78.7	78.7	78.7	78.7
6000	36.8	67.1	72.3	74.8	76.1	77.4	78.7	78.7	78.7	78.7	78.7	78.7	78.7
5000	38.1	68.4	73.6	76.1	77.4	78.7	80.0	80.0	80.0	80.0	80.0	80.0	80.0
4500	38.7	69.0	74.2	76.8	78.1	79.4	80.7	80.7	80.7	80.7	80.7	80.7	80.7
4000	39.4	69.7	75.5	78.1	79.4	80.7	81.9	81.9	81.9	81.9	81.9	81.9	81.9
3500	40.7	72.3	78.1	80.7	81.9	83.2	84.5	84.5	84.5	84.5	84.5	84.5	84.5
3000	40.7	72.3	78.1	80.7	81.9	83.2	84.5	84.5	84.5	84.5	84.5	84.5	84.5
2500	41.3	74.2	80.7	84.5	85.8	87.1	88.4	88.4	88.4	88.4	88.4	88.4	88.4
2000	41.9	75.5	81.9	86.5	87.7	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3
1800	41.9	75.5	81.9	86.5	87.7	89.0	90.3	90.3	90.3	90.3	90.3	90.3	90.3
1500	41.9	76.8	83.2	87.7	89.0	90.3	91.6	91.6	91.6	91.6	91.6	91.6	91.6
1200	41.9	77.4	85.2	89.7	91.0	92.3	93.6	93.6	93.6	93.6	93.6	93.6	93.6
1000	41.9	77.4	85.2	89.7	91.0	92.3	93.6	93.6	93.6	93.6	93.6	93.6	93.6
900	41.9	78.1	86.5	91.6	92.9	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5
800	41.9	78.1	87.1	92.3	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8
700	41.9	78.1	87.1	92.3	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8
600	41.9	78.1	87.1	92.3	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8
500	41.9	78.1	87.1	92.3	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8
400	41.9	78.7	88.4	93.6	95.5	96.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7
300	41.9	78.7	88.4	93.6	95.5	96.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7
200	41.9	78.7	88.4	93.6	95.5	96.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7
100	41.9	78.7	88.4	93.6	95.5	96.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7
0	41.9	78.7	88.4	93.6	95.5	96.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS 155

CEILING VERSUS VISIBILITY

23239 STATION ALAMEDA, CALIFORNIA

73-77

YEARS

DEC MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

22 HOURS (P.T.)

3021

1234-18766

5703 CEILING VERSUS VISIBILITY JAN 68

1111

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	31.0	49.7	55.5	61.3	62.6	63.9	65.2	65.2	65.2	65.8	65.8	65.8	65.8
≥ 20000	32.3	52.3	58.1	63.9	65.8	67.1	68.4	68.4	68.4	69.0	69.0	69.0	69.0
≥ 18000	32.3	52.3	58.1	63.9	65.8	67.1	68.4	68.4	68.4	69.0	69.0	69.0	69.0
≥ 16000	32.3	52.3	58.1	63.9	65.8	67.1	68.4	68.4	68.4	69.0	69.0	69.0	69.0
≥ 14000	33.6	53.6	59.4	65.2	67.1	68.4	69.7	69.7	69.7	70.3	70.3	70.3	70.3
≥ 12000	34.8	54.8	60.7	67.1	69.0	70.3	71.6	71.6	71.6	72.3	72.3	72.3	72.3
≥ 10000	34.8	55.5	61.3	67.7	69.7	71.0	72.3	72.3	72.3	72.9	72.9	72.9	72.9
≥ 9000	34.8	55.5	61.3	67.7	69.7	71.0	72.3	72.3	72.3	73.6	73.6	73.6	73.6
≥ 8000	36.1	57.4	63.2	69.7	71.6	72.9	74.8	74.8	74.8	75.5	75.5	75.5	75.5
≥ 7000	36.1	57.4	63.2	69.7	71.6	72.9	74.8	74.8	74.8	75.5	75.5	75.5	75.5
≥ 6000	36.1	57.4	63.2	69.7	71.6	72.9	74.8	74.8	74.8	75.5	75.5	75.5	75.5
≥ 5000	36.1	57.4	63.2	69.7	71.6	72.9	74.8	74.8	74.8	75.5	75.5	75.5	75.5
≥ 4500	36.1	57.4	63.2	69.7	72.3	73.6	75.5	75.5	75.5	76.1	76.1	76.1	76.1
≥ 4000	36.1	58.1	63.9	70.3	72.3	73.6	75.5	75.5	75.5	76.8	76.8	76.8	76.8
≥ 3500	37.4	60.0	65.8	72.3	74.8	76.1	78.1	78.1	78.1	78.7	78.7	78.7	78.7
≥ 3000	37.4	61.3	67.1	73.6	76.1	77.4	79.4	79.4	79.4	80.0	80.0	80.0	80.0
≥ 2500	39.4	63.9	69.7	76.1	78.7	80.0	81.9	81.9	81.9	82.6	82.6	82.6	82.6
≥ 2000	39.4	65.8	71.6	78.7	81.3	82.6	84.5	84.5	84.5	85.2	85.2	85.2	85.2
≥ 1800	39.4	65.8	71.6	78.7	81.3	82.6	84.5	84.5	84.5	85.2	85.2	85.2	85.2
≥ 1500	40.0	67.7	73.6	81.9	84.5	85.8	87.7	87.7	87.7	88.4	88.4	88.4	88.4
≥ 1200	40.0	67.7	73.6	82.6	85.2	87.1	89.0	89.0	89.0	89.7	89.7	89.7	89.7
≥ 1000	40.0	68.4	75.5	85.2	87.7	89.7	91.6	91.6	91.6	92.3	92.3	92.3	92.3
≥ 900	40.0	68.4	76.1	86.5	89.0	91.0	92.9	92.9	92.9	93.6	93.6	93.6	93.6
≥ 800	40.0	68.4	76.1	86.5	89.0	91.0	92.9	92.9	92.9	93.6	93.6	93.6	93.6
≥ 700	40.0	69.7	77.4	87.7	90.3	92.3	94.2	94.2	94.2	94.8	94.8	94.8	94.8
≥ 600	40.0	69.7	77.4	87.7	90.3	92.3	94.2	94.2	94.2	95.5	95.5	95.5	95.5
≥ 500	40.0	70.3	78.1	88.4	91.0	92.9	95.5	95.5	95.5	96.1	96.1	96.1	96.1
≥ 400	40.0	70.3	78.1	88.4	91.0	92.9	95.5	95.5	95.5	96.8	96.8	96.8	96.8
≥ 300	40.0	70.3	78.1	88.4	91.6	93.6	96.1	96.8	96.8	97.4	97.4	97.4	97.4
≥ 200	40.0	70.3	78.1	88.4	91.6	93.6	96.1	96.8	96.8	97.4	97.4	97.4	97.4
≥ 100	40.0	70.3	78.1	88.4	91.6	93.6	96.1	96.8	96.8	97.4	97.4	97.4	97.4
0	40.0	70.3	78.1	88.4	91.6	93.6	96.1	96.8	96.8	97.4	97.4	97.4	97.4

TOTAL NUMBER OF OBSERVATIONS

155

NAVWEASERVCOM

CEILING VERSUS VISIBILITY

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

73-77

YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL
HOURS (24 HRS.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	22.9	39.5	44.4	50.2	54.3	56.6	58.7	59.2	59.2	59.6	59.8	59.8	59.8
≥ 20000	24.2	41.7	46.6	53.1	57.3	60.1	62.5	63.0	63.0	63.6	63.7	63.8	63.8
AI 18000	24.4	42.0	46.9	53.4	57.7	60.4	62.8	63.3	63.3	63.9	64.0	64.1	64.1
AI 16000	24.4	42.0	46.9	53.4	57.7	60.4	62.8	63.3	63.3	63.9	64.0	64.1	64.1
AI 14000	25.0	43.2	48.3	54.9	59.2	61.9	64.4	64.8	64.8	65.4	65.6	65.7	65.7
AI 12000	26.1	44.7	49.8	56.7	61.3	64.1	66.6	67.3	67.3	67.8	68.0	68.1	68.2
AI 10000	26.8	45.8	51.0	58.1	62.9	65.8	68.5	69.1	69.1	69.8	69.9	70.0	70.1
AI 9000	26.9	46.0	51.1	58.2	63.2	66.1	68.8	69.4	69.4	70.2	70.3	70.4	70.5
AI 8000	27.7	47.7	53.0	60.2	65.2	68.2	70.9	71.6	71.6	72.3	72.5	72.6	72.7
AI 7000	27.9	48.1	53.3	60.6	65.6	68.5	71.2	71.9	71.9	72.7	72.9	73.0	73.1
AI 6000	28.2	48.4	53.6	60.9	65.9	68.8	71.5	72.3	72.3	73.1	73.2	73.3	73.4
AI 5000	28.6	49.2	54.4	61.7	66.7	69.6	72.3	73.1	73.1	73.9	74.0	74.1	74.2
AI 4500	29.4	50.6	55.9	63.2	68.2	71.1	73.9	74.6	74.6	75.4	75.6	75.7	75.8
AI 4000	29.6	51.1	56.5	63.8	68.9	71.8	74.5	75.2	75.2	76.1	76.2	76.3	76.4
AI 3500	30.0	51.9	57.3	64.7	69.8	72.7	75.5	76.3	76.3	77.1	77.3	77.3	77.4
AI 3000	30.2	53.2	58.6	66.3	71.5	74.4	77.3	78.2	78.2	79.0	79.1	79.2	79.3
AI 2500	31.2	54.8	60.4	68.1	73.4	76.3	79.1	80.0	80.0	80.8	81.0	81.1	81.2
AI 2000	31.6	56.1	61.8	69.8	75.1	78.0	80.8	81.7	81.7	82.5	82.7	82.7	82.8
AI 1800	31.6	56.4	62.0	70.0	75.4	78.4	81.2	82.1	82.1	82.9	83.1	83.2	83.3
AI 1500	31.9	57.8	63.6	71.8	77.3	80.5	83.3	84.3	84.3	85.1	85.2	85.3	85.4
AI 1200	31.9	58.7	64.6	73.0	78.7	81.9	84.8	85.8	85.8	86.6	86.8	86.9	87.0
AI 1000	31.9	59.1	65.3	74.3	80.1	83.3	86.4	87.3	87.3	88.2	88.4	88.5	88.6
AI 900	31.9	59.4	65.9	75.0	80.9	84.1	87.3	88.2	88.2	89.2	89.4	89.4	89.5
AI 800	31.9	59.4	66.1	75.2	81.2	84.4	87.7	88.6	88.6	89.6	89.8	89.8	89.9
AI 700	31.9	60.1	66.9	76.2	82.2	85.4	89.0	90.1	90.1	91.1	91.2	91.4	91.5
AI 600	31.9	60.2	67.3	76.7	83.1	86.3	90.1	91.3	91.3	92.3	92.4	92.6	92.7
AI 500	31.9	60.3	67.3	77.2	83.8	87.1	91.1	92.4	92.4	93.6	93.9	94.0	94.1
AI 400	31.9	60.6	67.7	77.5	84.2	87.6	91.9	93.4	93.4	94.7	95.0	95.2	95.3
AI 300	31.9	60.6	67.7	77.7	84.4	87.9	92.3	93.9	93.9	95.5	95.9	96.2	96.3
AI 200	31.9	60.6	67.7	77.7	84.4	87.9	92.4	94.0	94.0	95.7	96.5	97.1	97.2
AI 100	31.9	60.6	67.7	77.7	84.4	88.0	92.5	94.0	94.0	95.8	96.6	97.3	97.4
0	31.9	60.6	67.7	77.7	84.4	88.0	92.5	94.0	94.0	95.8	96.6	97.3	97.4

TOTAL NUMBER OF OBSERVATIONS

1240

CEILING VERSUS VISIBILITY

33229 ALAMEDA, CALIFORNIA

73-77

YEARS

ALL MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL HOURS (P.M.)

3019

MMHH

5703 CEILING VERSUS VISIBILITY JAN 68

RRP

CEILING (FEET)	VISIBILITY (STATUTE MILES)														≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	
NO CEILING	40.4	57.7	59.5	60.9	61.8	62.2	62.5	62.5	62.6	62.6	62.6	62.6	62.6	62.7	62.7
≥ 20000	42.2	60.9	62.9	64.4	65.4	65.8	66.2	66.2	66.2	66.3	66.3	66.3	66.3	66.4	66.4
18000	42.3	61.0	63.1	64.5	65.5	66.0	66.3	66.4	66.4	66.5	66.5	66.5	66.5	66.5	66.6
16000	42.4	61.2	63.2	64.7	65.7	66.2	66.5	66.6	66.6	66.6	66.7	66.7	66.7	66.7	66.8
14000	42.9	62.1	64.2	65.7	66.7	67.1	67.5	67.5	67.6	67.6	67.6	67.7	67.7	67.7	67.8
12000	43.4	63.2	65.3	66.9	67.9	68.4	68.8	68.8	68.8	68.9	68.9	68.9	68.9	69.0	69.0
10000	44.2	64.2	66.4	68.0	69.1	69.6	70.0	70.1	70.1	70.1	70.1	70.2	70.2	70.2	70.3
9000	44.3	64.5	66.6	68.3	69.3	69.8	70.2	70.3	70.3	70.4	70.4	70.4	70.4	70.5	70.5
8000	45.0	65.5	67.7	69.4	70.5	71.0	71.4	71.4	71.5	71.5	71.5	71.6	71.6	71.6	71.7
7000	45.3	65.9	68.1	69.8	70.9	71.4	71.8	71.9	71.9	72.0	72.0	72.0	72.0	72.0	72.1
6000	45.5	66.3	68.5	70.2	71.3	71.8	72.2	72.2	72.3	72.3	72.4	72.4	72.4	72.4	72.5
5000	45.9	67.1	69.3	71.0	72.2	72.7	73.1	73.1	73.1	73.2	73.2	73.3	73.3	73.3	73.4
4500	46.5	68.2	70.5	72.2	73.3	73.8	74.2	74.3	74.3	74.4	74.4	74.4	74.4	74.5	74.5
4000	46.7	68.7	71.0	72.7	73.9	74.4	74.8	74.9	74.9	75.0	75.0	75.0	75.0	75.1	75.1
3500	47.2	69.4	71.7	73.5	74.7	75.2	75.6	75.7	75.7	75.8	75.8	75.8	75.8	75.9	75.9
3000	47.9	70.8	73.2	75.0	76.2	76.7	77.1	77.2	77.2	77.3	77.3	77.3	77.3	77.4	77.4
2500	48.6	72.1	74.5	76.4	77.6	78.1	78.5	78.6	78.6	78.7	78.7	78.7	78.8	78.8	78.9
2000	49.7	74.2	76.7	78.7	79.9	80.4	80.9	81.0	81.0	81.1	81.1	81.1	81.1	81.1	81.2
1800	50.0	74.9	77.5	79.5	80.7	81.2	81.7	81.8	81.8	81.9	81.9	81.9	81.9	82.0	82.0
1500	51.0	77.4	80.0	82.1	83.4	84.0	84.5	84.6	84.6	84.7	84.7	84.7	84.7	84.8	84.8
1200	52.0	79.8	82.4	84.6	86.0	86.5	87.1	87.2	87.2	87.3	87.3	87.3	87.3	87.3	87.4
1000	52.8	82.1	84.9	87.2	88.6	89.2	89.7	89.9	89.9	90.0	90.0	90.0	90.0	90.0	90.1
900	53.2	83.6	86.5	88.8	90.2	90.9	91.4	91.5	91.5	91.6	91.7	91.7	91.7	91.7	91.8
800	53.5	84.6	87.6	89.9	91.4	92.0	92.6	92.7	92.7	92.8	92.8	92.8	92.9	92.9	93.0
700	53.6	85.9	89.0	91.4	92.9	93.5	94.1	94.3	94.3	94.4	94.4	94.4	94.5	94.5	94.6
600	53.8	87.1	90.4	92.8	94.4	95.0	95.7	95.9	95.9	96.0	96.0	96.0	96.1	96.1	96.2
500	53.8	88.0	91.4	94.1	95.7	96.3	97.1	97.3	97.3	97.5	97.5	97.5	97.6	97.6	97.7
400	53.8	88.5	92.2	95.0	96.7	97.4	98.2	98.5	98.5	98.7	98.8	98.8	98.8	98.9	98.9
300	53.8	88.6	92.3	95.2	96.9	97.6	98.5	98.8	98.8	99.1	99.2	99.2	99.2	99.3	99.3
200	53.8	88.6	92.3	95.2	97.0	97.7	98.5	98.8	98.9	99.2	99.3	99.3	99.3	99.4	99.4
100	53.8	88.6	92.3	95.2	97.0	97.7	98.6	98.8	98.9	99.2	99.3	99.3	99.4	99.4	99.5
0	53.8	88.6	92.3	95.2	97.0	97.7	98.6	98.9	98.9	99.2	99.3	99.3	99.4	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS

14607

NAYWEASERVCOM

5704 SKY COVER JAN 68

JAN
MONTH

73-77

STATION	STATION NAME
23239	ALAMEDA, CALIFORNIA

PERIOD

**PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)**

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
JAN	01	41.3	1.9	3.9	4.5	3.2	5.2	2.6	3.9	2.6	2.6	28.4	4.3	155
	04	40.0	1.9	4.5	5.2	2.6	2.6	3.2	2.6	1.3	.6	35.5	4.6	155
	07	24.5	3.2	7.7	6.5	3.9	3.2	.6	4.5	7.1	5.8	32.9	5.4	155
	10	19.4	4.5	5.2	3.9	4.5	5.2	2.6	9.0	7.1	7.1	31.6	5.9	155
	13	19.4	6.5	4.5	3.2	5.2	5.2	3.2	9.0	11.6	5.8	26.5	5.6	155
	16	21.3	5.8	8.4	5.2	3.2	3.2	3.9	8.4	7.1	6.5	27.1	5.3	155
	19	31.6	5.8	6.5	3.9	6.5	6.5	2.6	4.5	7.1	1.9	23.2	4.4	155
	22	40.0	1.9	4.5	5.8	2.6	2.6	1.3	7.7	5.8	5.2	22.6	4.3	155
TOTALS		29.7	3.9	5.7	4.8	4.0	4.2	2.5	6.2	6.2	4.4	28.5	5.0	1240

SKY COVER

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

STATION NAME

72-77

PERIOD

FEB
MONTH

MONTH

**PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)**

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
FEB	01	26.8	2.1	3.5	3.5	5.0	5.7	3.5	5.0	5.7	2.8	38.3	5.8	141
	04	26.1	2.1	4.3	4.3	4.3	4.3	1.4	5.7	6.4	2.8	40.4	5.9	141
	07	14.9	4.3	4.3	5.0	6.4	2.8	3.5	6.4	6.4	2.8	43.3	6.4	141
	10	14.2	2.1	2.8	4.3	5.0	.7	2.8	5.7	9.2	11.3	41.8	7.0	141
	13	12.1	4.3	4.3	8.5	4.3	3.5	2.1	5.0	9.2	6.4	40.4	6.6	141
	16	15.6	2.1	3.5	4.3	3.5	3.5	2.8	4.3	15.6	3.5	41.1	6.7	141
	19	19.1	5.0	5.0	5.0	4.3	1.4	.7	5.0	17.0	5.0	32.6	6.0	141
	22	27.0	3.5	6.4	5.7	2.8	.7	5.0	5.0	8.5	2.8	32.6	5.3	141
TOTALS		10.0	3.2	4.3	5.1	4.5	2.8	2.7	5.3	9.8	4.7	38.8	6.2	1128

5704 SKY COVER JAN 68

MAR
MONTH

73-77

STATION	STATION NAME
29239	ALAMEDA, CALIFORNIA

PERIOD

**PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)**

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
MAR	01	31.6	1.3	1.9	3.2	4.5	2.6	1.3	6.5	9.0	4.5	33.5	5.5	155
	04	30.3	2.6	3.2	2.6	5.2	1.9	4.5	3.2	3.9	3.2	39.4	5.5	155
	07	20.6	3.2	3.2	4.5	3.2	1.9	3.9	4.5	7.7	4.5	42.6	6.3	155
	10	20.6	3.2	3.2	3.9	4.5	7.1	4.5	7.1	5.2	9.0	31.6	5.9	155
	13	20.6	3.2	3.9	6.5	3.9	5.8	1.3	6.5	9.0	6.5	32.9	5.9	155
	16	13.5	7.7	5.8	5.8	5.8	5.8	2.6	7.7	9.0	3.2	32.9	5.9	155
	19	19.4	2.6	7.1	7.7	6.5	5.8	4.5	6.5	6.5	4.5	29.0	5.5	155
	22	32.9	2.6	5.2	5.2	3.9	1.3	4.5	2.6	8.4	4.5	29.0	4.9	155
TOTALS		23.7	3.3	4.2	4.9	4.7	4.0	3.4	5.6	7.3	5.0	33.9	5.7	1240

SKY COVER

5704 SKY COVER JAN 68

APR
MONTH

73-77
PERIOD

23239 ALAMEDA, CALIFORNIA
STATION NAME

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.
		0	1	2	3	4	5	6	7	8	9	10	
APR	01	44.7	2.0	4.0	3.3	5.3	3.3	1.3	4.0	6.0	5.3	20.7	4.0 150
	04	40.0	3.3	4.7	8.0	4.0	2.0	.7	3.3	3.3	4.7	26.0	4.2 150
	07	26.7	8.0	4.0	3.3	6.0	2.7	6.0	3.3	5.3	7.3	27.3	5.0 150
	10	36.7	4.0	1.3	3.3	4.0	4.7	1.3	6.7	7.3	8.7	22.0	4.7 150
	13	33.3	6.0	7.3	2.7	4.7	1.3	4.0	5.3	12.0	3.3	20.0	4.4 150
	16	30.7	6.7	7.3	2.0	6.0	2.7	6.7	4.7	12.0	7.3	14.0	4.4 150
	19	28.7	7.3	7.3	8.0	5.3	6.7	2.7	6.7	8.0	4.7	14.7	4.2 150
	22	40.0	5.3	6.0	6.0	5.3	3.3	4.0	4.0	4.0	2.0	20.0	3.8 150
TOTALS		35.1	5.3	5.2	4.6	5.1	3.3	3.3	4.8	7.2	5.4	20.6	4.3 1200

SKY COVER

MAY
MONTH

73-77

PERIOD

23239 ALAMEDA, CALIFORNIA
STATION NAMEPERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.
		0	1	2	3	4	5	6	7	8	9	10	
MAY	01	44.8	3.9	4.5	5.8	3.9	1.9	.6	3.2	4.5	5.2	21.4	3.8 154
	04	33.5	7.1	3.9	5.8	3.2	3.2	4.5	1.9	9.0	2.6	25.2	4.5 155
	07	28.6	5.2	5.2	3.2	5.2	3.9	2.6	5.8	8.4	5.8	26.5	5.1 155
	10	40.6	2.6	4.5	3.2	4.5	8.4	3.2	3.9	4.5	4.5	20.0	4.0 155
	13	43.2	7.1	7.1	6.5	3.2	3.2	1.9	3.9	11.0	3.2	9.7	3.2 155
	16	40.6	7.7	6.5	6.5	3.2	4.5	2.6	8.4	5.8	4.5	9.7	3.3 155
	19	36.1	6.5	7.1	7.1	6.5	3.9	1.3	6.5	5.8	7.7	11.6	3.7 155
	22	44.5	5.2	5.2	3.2	5.8	3.2	3.2	3.9	4.5	4.5	16.8	3.6 155
TOTALS		39.0	5.7	5.5	5.2	4.4	4.0	2.5	4.7	6.7	4.8	17.6	3.9 1239

AD-A060 998

NAVAL WEATHER SERVICE DETACHMENT / SHEVILLE N C
SUMMARY OF METEOROLOGICAL OBSERVATIONS, SURFACE (SMOS), ALAMEDA--ETC(U)
JUN 78

F/G 4/2

UNCLASSIFIED

NL

4 OF 4

AD
A060998



END
DATE
FILMED
-79
DDC

5704 SKY COVER JAN 68

Aug

73077

STATION	STATION NAME
23230	ALAMEDA, CALIFORNIA

PERIOD

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
AUG	01	31.0	3.2	2.6	5.2	3.2	2.6	1.3	3.2	2.6	3.2	41.9	5.5	155
	04	25.8	1.3	2.6	1.9	1.3	.6	1.3	3.2	2.6	3.9	55.5	6.6	155
	07	20.6		1.3	1.3	2.6	.6	.6	1.9	3.9	7.1	60.0	7.3	155
	10	31.0	2.6	1.9	4.5	2.6	4.5		1.3	5.8	3.9	41.9	5.6	155
	13	36.2	6.5	5.2	4.5	3.2	3.2	3.2	5.8	2.6	3.9	9.7	2.7	155
	16	56.8	6.5	7.7	8.4	3.2	1.3	1.3	1.9	4.5	3.9	6.5	2.2	155
	19	40.0	5.2	9.7	3.2	6.5	5.2	3.9	4.5	3.2	5.2	15.5	3.6	155
	22	36.8	5.8	7.1	5.2	3.2	.6	3.2	5.8	3.9	2.6	27.7	4.4	155
TOTALS		96.8	2.6	4.8	4.3	3.0	2.3	1.9	3.5	3.6	6.2	8.3	4.7	1260

SKY COVER

5704 SKY COVER JAN 68

SEP
MONTH

73-77

PERIOD

23239 ALAMEDA, CALIFORNIA
STATION NAME

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
SEP	01	32.0	2.0	4.0	3.3	4.0		2.0	4.7	7.3	4.7	36.0	5.4	150
	04	23.3	1.3	4.7	2.7	2.0	1.3	3.3	.7	5.3	4.0	51.3	6.5	150
	07	16.0	2.0	2.0	4.0	3.3	2.0	4.7	2.7	2.7	9.3	51.3	7.1	150
	10	23.3	4.0	2.7	5.3	3.3	4.7	.7	2.7	4.7	5.3	41.3	5.8	150
	13	50.0	3.3	4.0	7.3	3.3	5.3	2.0	2.7	2.7	6.0	13.3	3.1	150
	16	54.7	3.3	2.7	6.7	5.3	2.7	3.3	3.3	5.3	4.0	8.7	2.7	150
	19	47.3	4.7	5.3	3.3	6.0	3.3	4.0	1.3	6.0	6.0	12.7	3.3	150
	22	42.0	3.3	2.7	2.7	2.7	3.3	4.7	7.3	5.3	2.7	23.3	4.2	150
TOTALS		36.3	3.0	3.5	4.4	3.7	2.8	3.1	3.2	4.9	5.3	29.7	4.8	1200

5704 SKY COVER JAN 68

23239
STATION

STATION NAME
ALAMEDA, CALIFORNIA

73-77

PERIOD

OCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
067	01	45.8	3.9	3.2	3.9	1.3	3.2	2.6	5.2	9.7	3.2	18.1	3.8	155
	04	42.6	3.2	1.9	3.9	3.9	.6	5.2	1.9	5.8	4.5	26.5	4.3	155
	07	29.0	3.2	6.5	6.5	6.5	3.9	6.5	3.9	5.2	5.2	27.7	4.9	155
	10	28.6	6.5	8.4	9.7	3.9	4.5	3.2	3.9	5.2	5.8	20.6	4.4	155
	13	38.7	7.7	5.2	5.8	7.7	5.8	1.9	6.5	5.2	4.5	11.0	3.4	155
	16	47.1	1.9	6.5	5.8	6.5	5.2	2.6	3.9	6.5	3.9	12.3	3.3	155
	19	49.0	3.2	10.3	3.2	5.2	1.9	2.6	5.2	3.2	2.6	13.5	3.0	155
	22	51.0	3.2	1.9	6.5	2.6	3.9	3.9	9.0	3.2	2.6	14.2	3.3	155
TOTALS		45.8	4.1	5.2	5.2	4.7	3.6	3.2	4.9	5.5	4.0	18.0	3.8	1260

SKY COVER

5704 SKY COVER JAN 68

23239
STATION

ALAMEDA, CALIFORNIA

73-77

PERIOD

NOV
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
NOV	01	32.7	4.7	4.7	4.7	4.7	4.7	.7	4.0	9.3	4.7	25.3	4.7	150
	04	34.0	2.7	8.0	4.7	2.7	4.0	2.0	2.0	6.7	3.3	30.0	4.7	150
	07	15.3	5.3	6.7	9.3	4.7	2.7	3.3	7.3	9.3	4.7	31.3	5.8	150
	10	18.0	7.3	6.0	3.3	4.0	6.0	.7	6.7	11.3	6.7	30.0	5.8	150
	13	18.7	8.0	9.3	5.3	2.7	2.7	.7	4.7	10.0	10.7	27.3	5.5	150
	16	20.0	6.7	5.3	8.7	5.3	3.3	1.3	6.0	6.7	5.3	31.3	5.5	150
	19	30.7	5.3	6.0	2.7	6.7	6.7	3.3	3.3	10.0	3.3	22.0	4.6	150
	22	35.3	2.7	6.0	7.3	4.0	3.3	2.7	5.3	5.3	2.0	26.0	4.4	150
TOTALS		25.6	5.3	6.5	6.8	4.4	4.2	1.8	4.9	8.6	5.1	27.9	5.1	1200

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5704 SKY COVER JAN 68

STATION	STATION NAME
22239	ALAMEDA, CALIFORNIA

73-77

PERIOD

DEC
MONTH

**PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)**

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
DEC	01	29.7	.6	4.5	5.8	5.2	3.9	2.6	1.9	7.7	1.3	36.8	5.4	155
	04	28.4	2.6	5.2	5.8	7.1	2.6	1.9	4.5	5.8	2.6	33.5	5.2	155
	07	16.1	9.0	6.5	3.9	5.8	6.5	1.3	5.2	3.9	1.9	40.0	5.8	155
	10	16.8	7.1	5.2	3.9	1.9	3.9	3.2	5.2	7.1	4.5	41.3	6.2	155
	13	19.4	8.4	4.5	5.2	5.8	4.5	1.9	4.5	3.2	9.7	32.9	5.6	155
	16	21.9	7.1	4.5	6.5	5.2	5.2	3.2	1.3	5.2	6.5	33.5	5.5	155
	19	34.8	3.2	5.8	5.8	6.5	3.2	2.6	3.2	5.2	5.2	24.5	4.5	155
	22	34.2	2.6	3.9	7.1	7.1	2.6	3.2	7.1	2.6	4.5	25.2	4.5	155
TOTALS		95.2	5.1	5.0	4.5	4.6	4.1	2.5	4.1	5.1	4.5	33.5	5.3	1560

SKY COVER

5704 SKY COVER JAN 68

ALL MONTH

PERIOD

73-77

ALAMEDA, CALIFORNIA
STATION NAME

22239
STATION

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.
		0	1	2	3	4	5	6	7	8	9	10	
JAN	ALL	29.7	3.9	5.7	4.8	4.0	4.2	2.5	6.2	6.2	4.4	28.5	5.0 1240
FEB		19.0	3.2	4.3	5.1	4.5	2.8	2.7	5.3	9.8	4.7	38.8	6.2 1128
MAR		23.7	3.3	4.2	4.9	4.7	4.0	3.4	5.6	7.3	5.0	33.9	5.7 1240
APR		35.1	5.3	5.2	4.6	5.1	3.3	3.3	4.8	7.2	5.4	20.6	4.3 1200
MAY		39.0	5.7	5.5	5.2	4.4	4.0	2.5	4.7	6.7	4.8	17.6	3.9 1239
JUN		37.8	4.8	4.2	4.5	4.3	3.1	3.3	4.2	5.7	4.7	23.6	4.3 1200
JUL		47.7	4.0	4.4	3.1	3.1	2.3	2.1	3.1	2.8	2.8	24.6	3.8 1240
AUG		36.5	3.6	4.8	4.3	3.0	2.3	1.9	3.5	3.6	4.2	32.3	4.7 1240
SEP		36.3	3.0	3.5	4.4	3.7	2.8	3.1	3.2	4.9	5.3	29.7	4.8 1200
OCT		41.5	4.1	5.2	5.2	4.7	3.6	3.3	4.9	5.5	4.0	18.0	5.8 1240
NOV		25.6	5.3	6.5	5.8	4.4	4.2	1.8	4.9	8.6	5.1	27.9	5.1 1200
DEC		25.2	5.1	5.0	5.5	5.6	4.1	2.5	4.1	5.1	4.5	33.5	5.3 1240
TOTALS		32.1	4.3	4.9	4.8	4.3	3.4	2.7	4.5	6.1	4.6	27.4	4.7 14607

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PART E PSYCHROMETRIC SUMMARIES

In this section are presented various summaries of dry- and wet-bulb temperatures, dew points, and relative humidity. The order and manner of presentation follows:

1. Cumulative percentage frequency of occurrence - derived from daily observations and presented by month and annual for all years combined. These tabulations provide the cumulative percentage frequency to tenths of temperature by 5-degree Fahrenheit increments, plus mean temperature, standard deviation, and total number of observations in three separate tables as follows:
 - a. Daily maximum temperature
 - b. Daily minimum temperature
 - c. Daily mean temperature
2. Extreme values - derived from daily observations with extreme value given for each year and month of record available. Extremes are provided for a month if all days for a month contain valid observations. All months for a year must have valid extremes before the ANNUAL value is selected for that year. Means and standard deviations are computed for months and annual when four or more values are present for any column. Two tables of daily extreme temperatures are prepared:
 - a. Extreme maximum temperature
 - b. Extreme minimum temperature

NOTE: A supplementary list also provides extreme temperatures when less than a full month is reported.
3. Bivariate percentage frequency distribution and computations of dry-bulb versus wet-bulb temperature. This tabulation is derived from 3-hourly observations and is presented by month and annual, all hours and all years combined. The following information is provided:
 - a. The main body of the summary consists of a bivariate percentage frequency distribution of wet-bulb depression in 17 classes spread horizontally; by 2-degree intervals of dry-bulb temperature vertically. Also provided for each dry-bulb temperature interval is the total no. of observations with dry-bulb and wet-bulb temperatures combined; and again for dry-bulb, wet-bulb, and dew-point temperatures separately. Total observations for these four items is also provided in two lines at end of each tabulation table, which may require two pages in some cases.

NOTE: A percentage frequency in this table of ".0" represents one or more occurrences amounting to less than .05 percent.

- b. Statistical data for the individual elements of relative humidity, dry-bulb, wet-bulb, and dew-point temperatures are shown in the section at the bottom left of the forms. These consist of the sum of squares ($\sum X^2$), sums of values ($\sum X$), means (\bar{X}), and standard deviations (σx). The number of observations used in the computations for each element is also shown.
- c. At the lower right of the form are given the mean number of hours of occurrence for six ranges of dry-bulb, wet-bulb, and dew-point temperatures, and total number of hours possible in the period represented. Mean number of hours is shown to tenths and indicates mean number of hours per year in the annual summary, or mean number of hours per month in the tabulations by month.

NOTE: Wet-bulb temperature usually was not reported prior to 1946. Relative humidity usually was not reported prior to 1949, nor subsequent to June 1958; and was computed by machine methods for observations recorded during these periods. All values of dew-point temperature and relative humidity are with respect to water, unless otherwise indicated.

4. Means and standard deviations - These tabulations are derived from hourly observations and present the mean, standard deviation, and total number of observations for the eight standard 3-hour groups, by month and annual and again at the bottom for all hours combined. Records for all years available are combined. Tables are prepared for the following:

- a. Dry-bulb temperature
- b. Wet-bulb temperature
- c. Dew-point temperature

5. Cumulative percentage frequency of occurrence of relative humidity - This summary is derived from hourly observations and presents the cumulative percentage frequency of occurrence of relative humidity by increments of 10% classes, plus the mean relative humidity and total number of observations in two tables.

- a. Table 1 is prepared by month and annual, all years combined, with month being the vertical argument.
- b. Table 2 is prepared by month by standard 3-hour groups, with the hour groups being the vertical argument and a separate page for each month. All years are also combined for this summary.

6. Percentage frequency of occurrence of dry-bulb temperature versus wind direction - This tabulation is derived from hourly observations and is presented by month and annual, all hours and years combined. The main body of the summary consists of dry bulb temperatures spread vertically in four degree increments and horizontally by eight wind directions (plus calm).

DAILY TEMPERATURES

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

45-77

YEARS

MAXIMUM

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM DAILY OBSERVATIONS)

[illegible]

NAVWEASERVCOM

STATION	STATION NAME	YEARS
23239	ALAMEDA, CALIFORNIA	65-77

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM DAILY OBSERVATIONS)

[illegible]

NAVWEASERVCOM

YEARS

DAILY TEMPERATURES

NAME _____

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM DAILY OBSERVATIONS)

[illegible]

NAVWEASERVCOM

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

23239

ALAMEDA, CALIFORNIA

STATION

STATION NAME

1946-1977

YEARS

JANUARY

MONTH

DAY	MEAN TEMP		MAXIMUM TEMP				MINIMUM TEMP					
	AVERAGE ° F ° C		AVERAGE ° F ° C		EXTREME ° F ° C		EXTREME ° F ° C		DATE			
1	48.3	9.1	54.2	12.3	61	16.1	1973	42.4	5.8	34	1.1	1952
2	48.5	9.2	54.0	12.2	62	16.7	1964	42.9	6.1	36	2.2	1968*
3	48.0	8.9	53.6	12.0	64	17.8	1964	42.5	5.8	34	1.1	1968
4	47.7	8.7	53.6	12.0	64	17.8	1958	41.7	5.4	33	0.6	1950
5	47.7	8.7	53.4	11.9	63	17.2	1948	41.9	5.3	31	-0.6	1949
6	48.8	9.3	55.0	12.8	65	18.3	1948	42.6	5.9	34	1.1	1968*
7	48.2	9.0	53.8	12.1	63	17.2	1963	42.7	5.9	31	-0.6	1968
8	49.3	9.6	54.9	12.7	69	20.6	1962	43.8	6.6	37	2.8	1971
9	48.8	9.3	54.1	12.3	69	20.6	1962	43.5	6.4	35	1.7	1949
10	49.3	9.6	54.7	12.6	66	18.9	1962*	43.9	6.6	31	-0.6	1949
11	49.0	9.4	53.8	12.1	63	17.2	1959	44.1	6.7	30	-1.1	1949
12	49.8	9.9	55.4	13.0	72	22.2	1948	44.2	6.8	34	1.1	1949
13	49.5	9.7	55.4	13.0	66	18.9	1967	43.6	6.4	31	-0.6	1949
14	49.8	9.9	55.7	13.2	67	19.4	1975	43.8	6.6	37	2.8	1949
15	49.6	9.8	55.5	13.1	68	20.0	1966	43.8	6.6	35	1.7	1950
16	50.0	10.0	56.3	13.5	68	20.0	1948	43.7	6.3	37	2.8	1977
17	49.6	9.8	55.7	13.2	64	17.8	1971*	43.5	6.4	36	2.2	1947
18	50.1	10.1	55.7	13.2	68	20.0	1958	44.4	6.9	36	2.2	1947
19	50.1	10.1	54.9	12.7	67	19.4	1976	45.4	7.4	38	3.3	1967
20	50.3	10.2	55.8	13.2	69	20.6	1976	44.7	7.1	34	1.1	1949
21	50.0	10.0	55.3	12.9	66	18.9	1976	44.6	7.0	34	1.1	1962
22	50.9	10.5	56.9	13.8	72	22.2	1968	44.9	7.2	33	0.6	1962
23	50.8	10.4	57.2	14.0	71	21.7	1974	44.5	6.9	32	0.0	1949
24	50.0	10.0	55.4	13.0	67	19.4	1948	44.5	6.9	32	0.0	1949
25	50.2	10.1	55.7	13.2	64	17.8	1948	44.7	7.1	33	0.6	1949
26	50.5	10.3	56.8	13.8	66	18.9	1946	44.3	6.8	34	1.1	1949
27	50.2	10.1	56.3	13.5	64	17.8	1971	44.2	6.8	34	1.1	1949
28	50.0	10.0	56.3	13.5	68	20.0	1976	43.7	6.3	36	2.2	1957
29	49.6	9.8	55.2	12.9	64	17.8	1962*	44.0	6.7	35	1.7	1950
30	50.7	10.4	56.7	13.7	70	21.1	1976	44.7	7.1	38	3.3	1975*
31	50.8	10.4	56.9	13.8	71	21.7	1976	44.6	7.0	36	2.2	1972*
Monthly	49.6	9.8	55.3	12.9	72	22.2	1968*	43.8	6.6	30	-1.1	1949

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

5725 DAILY AVERAGE/EXTREME TEMP MAR 1978

23239 ALAMEDA, CALIFORNIA

1946-1977

STATION NAME

MONTH

YEARS

STATION

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		EXTREME		AVERAGE		MINIMUM TEMP		DATE
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	
1	51.7	10.9	57.7	14.3	73	22.8	73	22.8	49.8	7.7	34	1.1	1950
2	51.2	10.7	57.4	14.1	72	22.2	72	22.2	44.9	7.2	36	2.2	1949
3	51.3	10.7	57.6	14.2	69	20.6	69	20.6	45.1	7.3	38	3.3	1972*
4	51.9	11.1	57.9	14.4	69	20.6	69	20.6	45.8	7.7	38	3.3	1946
5	52.0	11.1	57.6	14.2	68	20.0	68	20.0	46.5	8.1	38	3.3	1976
6	52.8	11.6	58.7	14.8	70	21.1	70	21.1	46.9	8.3	36	2.2	1949
7	52.5	11.4	58.5	14.7	68	20.0	68	20.0	46.4	8.0	38	3.3	1948
8	52.9	11.6	59.1	15.1	73	22.8	73	22.8	46.7	8.2	36	2.2	1949
9	52.7	11.5	58.2	14.6	68	20.0	68	20.0	47.2	8.4	41	5.0	1950*
10	53.4	11.9	59.1	15.1	66	18.9	66	18.9	47.7	8.7	42	5.6	1949*
11	53.2	11.8	59.4	15.2	67	19.4	67	19.4	47.0	8.3	37	2.8	1949
12	53.0	11.7	59.2	15.1	69	20.6	69	20.6	46.8	8.2	34	1.1	1949
13	52.9	11.6	59.3	15.2	70	21.1	70	21.1	46.5	8.1	34	1.1	1949
14	52.9	11.6	59.3	15.2	74	23.3	74	23.3	46.5	8.1	34	1.1	1949
15	53.7	12.1	60.0	15.6	72	22.2	72	22.2	47.4	8.6	41	5.0	1956
16	53.5	11.9	59.5	15.3	70	21.1	70	21.1	47.4	8.6	38	3.3	1956
17	53.2	11.8	59.5	15.3	72	22.2	72	22.2	46.8	8.2	40	4.4	1956*
18	52.9	11.6	59.1	15.1	71	21.7	71	21.7	46.7	8.2	39	3.9	1956
19	53.2	11.8	59.2	15.1	76	24.4	76	24.4	47.3	8.5	39	3.9	1949
20	54.2	12.3	60.9	16.1	72	22.2	72	22.2	47.4	8.6	42	5.6	1976*
21	53.8	12.1	60.6	15.9	68	20.0	68	20.0	46.9	8.3	42	5.6	1976*
22	53.8	12.1	60.2	15.7	70	21.1	70	21.1	47.3	8.5	40	4.4	1964
23	54.5	12.5	61.6	16.4	72	22.2	72	22.2	47.3	8.5	42	5.6	1971*
24	55.0	12.8	62.0	16.7	76	24.4	76	24.4	47.9	8.8	40	4.4	1964
25	54.4	12.4	61.1	16.2	73	22.8	73	22.8	47.7	8.7	38	3.3	1964
26	53.5	11.9	60.0	15.6	76	24.4	76	24.4	47.1	8.4	37	2.8	1971
27	54.3	12.4	61.0	16.1	72	22.2	72	22.2	47.6	8.7	36	2.2	1962
28	54.2	12.3	60.3	15.7	70	21.1	70	21.1	48.0	8.9	40	4.4	1962*
29	53.8	12.1	60.5	15.8	71	21.7	71	21.7	47.1	8.4	42	5.6	1964
30													
31													
Monthly	53.2	11.8	59.4	15.2	76	24.4	76	24.4	46.9	8.3	34	1.1	1950*

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

5725 DAILY AVERAGE/EXTREME TEMP MAR 1978

STATION 23239 ALAMEDA, CALIFORNIA STATION NAME YEARS MONTH

MARCH

1945-1977

DAY	MEAN TEMP		AVERAGE		EXTREME		DATE		AVERAGE		EXTREME		DATE	
	° F	° C	° F	° C	° F	° C			° F	° C	° F	° C		
1	53.2	11.8	59.9	15.5	76	24.4	1954		46.5	8.1	38	3.3	1966	
2	53.2	11.8	59.7	15.4	71	21.7	1968*		46.6	8.1	37	2.8	1971*	
3	53.5	11.9	60.5	15.8	80	26.7	1959		46.6	8.1	36	2.2	1966	
4	54.3	12.4	60.9	16.1	77	25.0	1959		47.8	8.8	40	4.4	1976*	
5	54.1	12.3	60.7	15.9	74	23.3	1972		47.5	8.6	38	3.3	1971	
6	54.0	12.2	60.6	15.9	74	23.3	1953		47.5	8.6	39	3.9	1971*	
7	54.4	12.4	61.5	16.4	78	25.6	1953		47.3	8.5	40	4.4	1964	
8	54.8	12.7	61.3	16.3	73	22.8	1955*		48.2	9.0	43	6.1	1952	
9	54.0	12.2	59.6	15.3	72	22.2	1946		48.4	9.1	43	6.1	1958*	
10	53.6	12.0	59.9	15.5	70	21.1	1959		47.3	8.5	41	5.0	1951	
11	54.2	12.3	60.6	15.9	72	22.2	1959		47.9	8.8	41	5.0	1951	
12	54.3	12.4	60.7	15.9	71	21.7	1959		47.8	8.8	43	6.1	1962*	
13	54.3	12.4	61.5	16.4	76	24.4	1947		47.1	8.4	39	3.9	1973	
14	54.5	12.5	62.0	16.7	77	25.0	1951		47.0	8.3	42	5.6	1952	
15	55.4	13.0	62.7	17.1	82	27.8	1972		48.2	9.0	42	5.6	1948	
16	55.3	12.9	62.1	16.7	80	26.7	1960		48.5	9.2	43	6.1	1977*	
17	55.4	13.0	62.5	16.9	79	26.1	1960		48.4	9.1	41	5.0	1966*	
18	55.7	13.2	63.1	17.3	78	25.6	1951		48.4	9.1	41	5.0	1943	
19	55.8	13.2	63.3	17.4	76	24.4	1964		48.3	9.1	41	5.0	1946	
20	54.9	12.7	61.8	16.6	74	23.3	1965		48.0	8.9	41	5.0	1952	
21	55.0	12.8	61.9	16.6	76	24.4	1965		48.1	8.9	44	6.7	1969*	
22	54.6	12.6	60.9	16.1	69	20.6	1968*		48.2	9.0	43	6.1	1964	
23	55.4	13.0	62.3	16.8	75	23.9	1970		48.5	9.2	42	5.6	1964	
24	55.4	13.0	62.6	17.0	77	25.0	1970		48.2	9.0	41	5.0	1943	
25	56.1	13.4	63.7	17.6	84	28.9	1952		48.5	9.2	41	5.0	1948	
26	57.2	14.0	65.1	18.4	84	28.9	1952		49.2	9.6	42	5.6	1972	
27	57.2	14.0	64.9	18.3	78	25.6	1969*		49.5	9.7	44	6.7	1976*	
28	56.7	13.7	64.2	17.9	79	26.1	1968		49.2	9.6	42	5.6	1950	
29	56.7	13.7	63.9	17.7	80	26.7	1968		49.4	9.7	44	6.7	1967*	
30	56.6	13.7	63.8	17.7	77	25.0	1950		49.4	9.7	44	6.7	1977*	
31	56.6	13.7	64.1	17.8	86	30.0	1966		49.2	9.6	42	5.6	1971	
Monthly	55.0	12.8	62.0	16.7	86	30.0	1966		48.1	8.9	36	2.2	1966	

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

23239

ALAMEDA, CALIFORNIA

1945-1977

APRIL

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP			MAXIMUM TEMP				MINIMUM TEMP					
	AVERAGE		°C	AVERAGE		EXTREME		DATE	AVERAGE		EXTREME		DATE
	°F	°C		°F	°C	°F	°C		°F	°C			
1	55.8	13.2	63.4	17.4	78	25.6	1959	48.3	9.1	38	3.3	1967	
2	57.0	13.9	65.0	18.3	80	26.7	1961	49.1	9.5	44	6.7	1976*	
3	58.2	14.6	66.6	19.2	84	28.9	1961	49.8	9.9	44	6.7	1967*	
4	58.4	14.7	66.5	19.2	81	27.2	1960*	50.3	10.2	45	7.2	1975*	
5	56.9	13.8	63.5	17.5	80	26.7	1961	50.3	10.2	43	6.1	1975	
6	56.6	13.7	63.5	17.5	80	26.7	1962	49.7	9.8	43	6.1	1975	
7	56.7	13.7	64.0	17.8	79	26.1	1962	49.3	9.6	44	6.7	1971*	
8	56.7	13.7	63.8	17.7	76	24.4	1961	49.3	9.7	43	6.1	1971	
9	56.2	13.4	63.2	17.3	82	27.8	1968	49.2	9.6	43	6.1	1953	
10	57.1	13.9	65.1	18.4	77	25.0	1949	49.2	9.6	42	5.6	1967	
11	57.5	14.2	65.7	18.7	83	28.3	1958	49.2	9.6	40	4.4	1967	
12	58.8	14.9	66.8	19.3	92	33.3	1947	50.7	10.4	44	6.7	1956	
13	57.8	14.3	65.0	18.3	86	30.0	1947	50.6	10.3	44	6.7	1972	
14	58.6	14.8	66.5	19.2	86	30.0	1947	50.6	10.3	46	7.8	1975*	
15	58.3	14.6	66.5	19.2	87	30.6	1966	50.2	10.1	44	6.7	1975	
16	57.2	14.0	65.1	18.4	80	26.7	1966	49.4	9.7	42	5.6	1967	
17	56.8	13.8	64.2	17.9	82	27.8	1954	49.4	9.7	43	6.1	1971	
18	57.7	14.3	65.5	18.6	83	28.3	1950	49.9	9.9	41	5.0	1967	
19	57.8	14.3	65.5	18.6	83	28.3	1950	50.0	10.0	40	4.4	1967	
20	57.1	13.9	64.7	18.2	78	25.6	1958	49.6	9.8	40	4.4	1967	
21	56.8	13.8	64.6	18.1	79	26.1	1958	49.1	9.5	40	4.4	1971	
22	57.3	14.1	65.0	18.3	85	29.4	1966	49.6	9.8	42	5.6	1967	
23	57.7	14.3	65.7	18.7	88	31.1	1966	49.8	9.9	44	6.7	1964	
24	57.5	14.2	65.1	18.4	76	24.4	1973*	49.9	9.9	43	6.1	1971	
25	57.2	14.0	64.3	17.9	75	23.9	1965*	50.1	10.1	44	6.7	1967	
26	57.9	14.4	65.8	18.8	84	28.9	1965	50.1	10.1	43	6.1	1967*	
27	58.0	14.4	65.8	18.8	81	27.2	1957	50.2	10.1	44	6.7	1970*	
28	57.5	14.2	65.2	18.4	84	28.9	1957	49.9	9.9	41	5.0	1967	
29	58.0	14.4	65.8	18.8	81	27.2	1945	50.2	10.1	43	6.1	1967	
30	58.1	14.5	66.0	18.9	82	27.8	1947	50.2	10.1	44	6.7	1967	
31													
Monthly	57.4	14.1	65.1	18.4	92	33.3	1947	49.8	9.9	38	3.3	1967	

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

23239

ALAMEDA, CALIFORNIA

1945-1977

MAY

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP.		AVERAGE		MAXIMUM TEMP.		AVERAGE		EXTREME		DATE		AVERAGE		EXTREME		DATE	
	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C			°F	°C	°F	°C		
1	58.2	14.6	65.7	18.7	87	30.6	30.6	19.7	87	30.6	19.7	1969*	50.7	10.4	45	7.2	1969*	
2	58.0	14.4	65.8	18.8	83	28.3	28.3	18.5	83	28.3	18.5	1970	50.1	10.1	44	6.7	1964	
3	57.5	14.2	64.7	18.2	80	26.7	26.7	17.6	80	26.7	17.6	1953	50.2	10.1	43	7.2	1950	
4	58.0	14.4	65.5	18.6	85	29.4	29.4	19.1	85	29.4	19.1	1953	50.6	10.3	44	6.7	1964*	
5	58.8	14.9	66.6	19.2	83	28.3	28.3	18.5	83	28.3	18.5	1969	51.0	10.6	43	6.1	1964	
6	59.8	15.4	68.1	20.1	89	31.7	31.7	19.8	89	31.7	19.8	1949	51.6	10.9	42	5.6	1964	
7	59.1	15.1	66.5	19.2	84	28.9	28.9	17.7	84	28.9	17.7	1959	51.7	10.9	46	7.8	1968	
8	57.7	14.3	64.2	17.9	72	22.2	22.2	16.8	72	22.2	16.8	1956*	51.2	10.7	48	8.9	1968*	
9	58.8	14.9	66.3	19.1	75	23.9	23.9	17.7	75	23.9	17.7	1950	51.2	10.7	48	8.9	1975*	
10	59.9	15.5	68.0	20.0	82	27.8	27.8	19.3	82	27.8	19.3	1959	51.8	11.0	47	8.3	1967	
11	60.0	15.6	68.3	20.2	85	29.4	29.4	19.7	85	29.4	19.7	1972	51.7	10.9	48	8.9	1968*	
12	59.4	15.2	67.0	19.4	100	37.8	37.8	20.4	100	37.8	20.4	1976	51.8	11.0	46	7.8	1967	
13	59.3	15.2	66.8	19.3	90	32.2	32.2	19.7	90	32.2	19.7	1972	51.9	11.1	47	8.3	1968	
14	59.9	15.5	68.1	20.1	83	28.3	28.3	19.3	83	28.3	19.3	1970	51.8	11.0	46	7.8	1968	
15	61.0	16.1	70.1	21.2	94	34.4	34.4	21.2	94	34.4	21.2	1970	51.9	11.1	43	7.2	1964	
16	60.8	16.0	69.3	20.7	89	31.7	31.7	20.7	89	31.7	20.7	1970*	52.2	11.2	48	8.9	1968*	
17	59.8	15.4	67.8	19.9	81	27.2	27.2	19.5	81	27.2	19.5	1952	51.8	11.0	48	8.9	1968*	
18	59.3	15.2	66.8	19.3	86	30.0	30.0	19.5	86	30.0	19.5	1953	51.8	11.0	47	8.3	1950	
19	59.9	15.5	67.3	19.6	85	29.4	29.4	19.5*	85	29.4	19.5*	1955*	52.5	11.4	48	8.9	1976	
20	59.0	15.0	66.5	19.2	79	26.1	26.1	19.2	79	26.1	19.2	1950	51.5	10.8	49	9.4	1976*	
21	59.8	15.4	67.6	19.8	78	25.6	25.6	19.5	78	25.6	19.5	1952	52.0	11.1	49	9.4	1967*	
22	59.8	15.4	67.3	19.6	82	27.8	27.8	19.8	82	27.8	19.8	1954	52.2	11.2	47	8.3	1960	
23	59.6	15.3	66.9	19.4	82	27.8	27.8	19.7*	82	27.8	19.7*	1970*	52.4	11.3	50	10.0	1976*	
24	59.9	15.5	67.4	19.7	81	27.2	27.2	19.6	81	27.2	19.6	1969	52.4	11.3	48	8.9	1967	
25	60.5	15.8	68.3	20.2	91	32.8	32.8	20.2	91	32.8	20.2	1951	52.6	11.4	48	8.9	1967*	
26	60.6	15.9	68.2	20.1	88	31.1	31.1	20.1	88	31.1	20.1	1974	52.9	11.6	49	9.4	1967*	
27	60.3	15.7	68.2	20.1	76	24.4	24.4	19.5*	76	24.4	19.5*	1953*	52.3	11.3	48	8.9	1967	
28	61.0	16.1	69.2	20.7	92	33.3	33.3	20.7	92	33.3	20.7	1975	52.8	11.6	49	9.4	1976*	
29	61.0	16.1	69.3	20.7	96	35.6	35.6	20.7	96	35.6	20.7	1975	52.8	11.6	49	9.4	1965	
30	60.7	15.9	68.5	20.3	84	28.9	28.9	20.3	84	28.9	20.3	1970	52.9	11.6	48	8.9	1971	
31	60.7	15.9	68.6	20.3	87	30.6	30.6	20.3	87	30.6	20.3	1970	52.9	11.6	46	7.8	1971	
Monthly	59.6	15.3	67.4	19.7	100	37.8	37.8	19.7	100	37.8	19.7	1976	51.8	11.0	42	5.6	1964	

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

5725 DAILY AVERAGE/EXTREME TEMP MAR 1978

23239

ALAMEDA, CALIFORNIA

1945-1977

JUNE

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		EXTREME		AVERAGE		MINIMUM TEMP		DATE
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	
1	61.5	16.4	69.5	20.8	84	28.9	84	28.9	53.5	11.9	49	9.4	1971*
2	61.7	16.5	69.7	20.9	94	34.4	94	34.4	53.8	12.1	48	8.9	1966
3	61.4	16.3	69.1	20.6	89	31.7	89	31.7	53.8	12.1	49	9.4	1966
4	62.2	16.8	70.6	21.4	100	37.8	100	37.8	53.9	12.2	50	10.0	1976*
5	62.0	16.7	69.7	20.9	84	28.9	84	28.9	54.4	12.4	49	9.4	1951
6	61.5	16.4	68.6	20.3	84	28.9	84	28.9	54.4	12.4	50	10.0	1971
7	61.0	16.1	68.1	20.1	86	30.0	86	30.0	54.0	12.2	50	10.0	1951
8	60.8	16.0	67.6	19.8	97	36.1	97	36.1	53.9	12.2	50	10.0	1967*
9	61.0	16.1	68.0	20.0	80	26.7	80	26.7	53.9	12.2	50	10.0	1967*
10	61.3	16.3	68.7	20.4	78	25.6	78	25.6	53.9	12.2	50	10.0	1972*
11	61.6	16.4	69.3	20.7	85	29.4	85	29.4	53.9	12.2	49	9.4	1965
12	62.0	16.7	69.9	21.1	88	31.1	88	31.1	54.1	12.3	50	10.0	1967*
13	62.5	16.9	71.0	21.7	96	35.6	96	35.6	54.1	12.3	50	10.0	1965
14	63.7	17.6	72.3	22.4	100	37.8	100	37.8	54.1	12.3	50	10.0	1967
15	63.6	17.6	71.8	22.1	94	34.4	94	34.4	54.4	13.0	50	10.0	1967
16	62.9	17.2	71.2	21.8	86	30.0	86	30.0	54.5	12.5	49	9.4	1977*
17	63.6	17.6	72.3	22.4	92	33.3	92	33.3	55.0	12.8	49	9.4	1967
18	63.4	17.4	71.8	22.1	88	31.1	88	31.1	55.1	12.8	52	11.1	1972*
19	62.9	17.2	71.0	21.7	90	32.2	90	32.2	54.8	12.7	51	10.6	1977*
20	63.4	17.4	72.1	22.3	93	33.9	93	33.9	54.7	12.6	50	10.0	1964
21	64.2	17.9	73.4	23.0	90	32.2	90	32.2	55.0	12.8	51	10.6	1973*
22	63.9	17.7	72.6	22.6	94	34.4	94	34.4	55.2	12.9	51	10.6	1966
23	63.0	17.2	70.9	21.6	100	37.8	100	37.8	55.0	12.8	50	10.0	1967
24	63.9	17.7	72.6	22.6	99	37.2	99	37.2	55.2	12.9	50	10.0	1967
25	63.3	17.4	71.7	22.1	96	35.6	96	35.6	55.0	12.8	51	10.6	1973*
26	63.0	17.2	71.2	21.8	94	34.4	94	34.4	54.8	12.7	50	10.0	1967
27	64.0	17.8	73.1	22.8	101	38.3	101	38.3	54.8	12.7	51	10.6	1967*
28	63.3	17.4	71.9	22.2	91	32.8	91	32.8	54.8	12.7	52	11.1	1972*
29	63.3	17.4	72.2	22.3	86	30.0	86	30.0	54.4	12.4	51	10.6	1949
30	63.0	17.2	71.4	21.9	89	31.7	89	31.7	54.5	12.5	50	10.0	1969
31													
Monthly	62.6	17.0	70.8	21.6	101	38.3	101	38.3	54.5	12.5	48	8.9	1966

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

23239

ALAMEDA, CALIFORNIA

1949-1977

JULY

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		AVERAGE		EXTREME		DATE	
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C
1	62.7	17.1	71.1	21.7	91	32.8	54.2	12.3	49	9.4	1970	1969
2	62.8	17.1	71.1	21.7	101	38.3	54.5	12.5	50	10.0	1970	1969*
3	62.3	16.8	70.4	21.3	91	32.8	54.3	12.4	49	9.4	1970	1965
4	62.1	16.7	70.1	21.2	83	28.3	54.1	12.3	48	8.9	1973	1965
5	62.2	16.8	70.2	21.2	79	26.1	54.2	12.3	48	8.9	1968	1965
6	62.2	16.8	70.0	21.1	81	27.2	54.3	12.4	48	8.9	1957	1965
7	62.1	16.7	69.7	20.9	77	25.0	54.5	12.5	50	10.0	1961*	1965
8	63.0	17.2	71.3	21.8	86	30.0	54.7	12.6	51	10.6	1961	1965
9	63.5	17.5	71.9	22.2	92	33.3	55.1	12.8	50	10.0	1961*	1965
10	63.9	17.7	72.5	22.5	95	35.0	55.3	12.9	49	9.4	1959	1965
11	63.5	17.5	71.9	22.2	89	31.7	55.1	12.8	51	10.6	1964	1965
12	63.0	17.2	70.8	21.6	86	30.0	55.2	12.9	50	10.0	1972	1965
13	63.3	17.4	71.5	21.9	97	36.1	55.2	12.9	50	10.0	1972	1965
14	63.6	17.6	71.7	22.1	100	37.8	55.5	13.1	50	10.0	1972	1965
15	63.2	17.3	71.0	21.7	84	28.9	55.3	12.9	50	10.0	1957	1965
16	63.6	17.6	71.9	22.2	81	27.2	55.4	13.0	52	11.1	1969*	1965*
17	63.5	17.5	71.3	21.8	85	29.4	55.7	13.2	53	11.7	1961	1967*
18	63.8	17.7	71.7	22.1	91	32.8	55.9	13.3	52	11.1	1968	1967*
19	63.3	17.4	71.1	21.7	84	28.9	55.5	13.1	51	10.6	1961	1964
20	63.0	17.2	70.5	21.4	83	28.3	55.5	13.1	51	10.6	1960	1964
21	62.9	17.2	70.5	21.4	82	27.8	55.3	12.9	50	10.0	1954	1961
22	63.5	17.5	71.3	21.8	81	27.2	55.7	13.2	52	11.1	1976	1967
23	62.7	17.1	69.9	21.1	83	28.3	55.5	13.1	52	11.1	1964	1967*
24	63.4	17.4	71.2	21.8	88	31.1	55.7	13.2	51	10.6	1974	1967
25	64.3	17.9	72.6	22.6	91	32.8	55.9	13.3	51	10.6	1973	1967
26	64.3	17.9	72.7	22.6	90	32.2	55.9	13.3	53	11.7	1963	1969*
27	63.5	17.5	71.3	21.8	85	29.4	55.8	13.2	53	11.7	1954	1970*
28	63.9	17.7	71.4	21.9	90	32.2	56.3	13.5	52	11.1	1954	1970*
29	63.1	17.3	70.4	21.3	88	31.1	55.8	13.2	52	11.1	1977	1970*
30	62.9	17.2	70.0	21.1	89	31.7	55.9	13.3	52	11.1	1977	1970
31	63.6	17.6	71.5	21.9	89	31.7	55.8	13.2	50	10.0	1966	1970
Monthly	63.2	17.3	71.1	21.7	101	38.3	55.3	12.9	48	8.9	1970	1965

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

23239

ALAMEDA, CALIFORNIA

1945-1977

AUGUST

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		MINIMUM TEMP		DATE
	° F	° C	° F	° C	° F	° C	° F	° C	
1	63.8	17.7	71.7	22.1	86	30.0	49	9.4	1970
2	63.2	17.3	70.8	21.6	88	31.1	50	10.0	1967
3	62.6	17.0	69.7	20.9	82	27.8	50	10.0	1967
4	62.7	17.1	70.0	21.1	87	30.6	49	9.4	1967
5	63.3	17.4	71.3	21.8	82	27.8	50	10.0	1967
6	64.4	18.0	72.6	22.6	84	28.9	52	11.1	1967
7	63.6	17.6	71.2	21.8	81	27.2	52	11.1	1970*
8	63.7	17.6	71.6	22.0	86	30.0	52	11.1	1969*
9	63.3	17.3	71.2	21.6	90	32.2	52	11.1	1967*
10	63.2	17.3	70.7	21.5	84	28.9	52	11.1	1973*
11	62.0	16.7	68.9	20.5	83	28.3	52	11.1	1967*
12	63.4	17.4	71.0	21.7	89	31.7	50	10.0	1967
13	63.6	17.6	71.4	21.9	87	30.6	52	11.1	1967
14	63.2	17.3	70.8	21.6	84	28.9	52	11.1	1969*
15	63.9	17.7	71.9	22.2	89	31.7	52	11.1	1966
16	64.1	17.8	72.1	22.3	84	28.9	52	11.1	1963*
17	63.9	17.7	71.7	22.1	82	27.8	53	11.7	1963*
18	63.6	17.6	71.2	21.8	84	28.9	52	11.1	1953*
19	64.3	17.9	72.0	22.2	88	31.1	51	10.6	1953
20	64.4	18.0	72.3	22.4	82	27.8	51	10.6	1953
21	64.4	18.0	72.5	22.5	85	29.4	52	11.1	1970*
22	64.7	18.2	73.1	22.8	89	31.7	51	10.6	1966
23	64.7	18.2	72.9	22.7	86	30.0	52	11.1	1966
24	64.6	18.1	72.7	22.6	84	28.9	53	11.7	1966
25	64.2	17.9	72.0	22.2	84	28.9	53	11.7	1966
26	64.1	17.8	71.8	22.1	83	28.3	52	11.1	1953
27	64.3	17.9	72.4	22.4	90	32.2	40	4.4	1972
28	64.9	18.3	73.0	22.8	87	30.6	52	11.1	1970*
29	65.5	18.6	74.0	23.3	102	38.9	51	10.6	1953
30	64.8	18.2	73.1	22.8	82	27.8	52	11.1	1952
31	64.7	18.2	72.9	22.7	88	31.1	52	11.1	1972
Monthly	63.9	17.7	71.8	22.1	102	38.9	40	4.4	1972

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

23239

ALAMEDA, CALIFORNIA

1949-1977

SEPTEMBER

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		AVERAGE		MINIMUM TEMP		DATE
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	
1	65.1	18.4	73.7	23.2	91	32.8	56.5	13.6	53	11.7	1970*
2	65.0	18.3	73.5	23.1	91	32.8	56.4	13.6	52	11.1	1970*
3	65.6	18.7	74.3	23.5	93	35.0	57.0	13.9	53	11.7	1970*
4	65.7	18.7	74.1	23.4	91	32.8	57.3	14.1	52	11.1	1973
5	65.1	18.4	73.0	22.8	85	29.4	57.2	14.0	54	12.2	1966*
6	65.7	18.7	74.2	23.4	86	30.0	57.2	14.0	54	12.2	1975*
7	66.1	18.9	75.0	23.9	91	32.8	57.2	14.0	52	11.1	1949
8	65.9	18.8	74.5	23.6	93	33.9	57.3	14.1	53	11.7	1946
9	65.6	18.7	74.1	23.4	90	32.2	57.1	13.9	52	11.1	1946
10	64.9	18.3	72.7	22.6	83	28.3	57.1	13.9	51	10.6	1964
11	64.7	18.2	72.6	22.6	90	32.2	56.7	13.7	51	10.6	1970
12	64.4	18.0	72.4	22.4	94	34.4	56.5	13.6	50	10.0	1970
13	65.1	18.4	73.2	22.9	102	38.9	57.0	13.9	53	11.7	1970*
14	65.7	18.7	74.1	23.4	106	41.1	57.3	14.1	51	10.6	1970
15	65.6	18.7	74.2	23.4	96	35.6	57.1	13.9	51	10.6	1970
16	65.1	18.4	73.0	22.8	97	36.1	57.2	14.0	53	11.7	1970*
17	65.0	18.3	73.0	22.8	86	30.0	57.0	13.9	53	11.7	1946
18	65.3	18.5	73.5	23.1	93	33.9	57.1	13.9	52	11.1	1960
19	65.6	18.7	74.0	23.3	93	33.9	57.1	13.9	52	11.1	1960
20	65.3	18.5	74.0	23.3	91	32.8	56.7	13.7	52	11.1	1965
21	66.2	19.0	75.4	24.1	90	32.2	57.0	13.9	52	11.1	1965
22	66.0	18.9	75.1	23.9	94	34.4	56.9	13.8	53	11.7	1969*
23	65.2	18.4	74.1	23.4	92	33.3	56.3	13.5	52	11.1	1960*
24	65.8	18.8	75.2	24.0	95	35.0	56.5	13.6	52	11.1	1949
25	66.3	19.1	75.5	24.2	92	33.3	57.2	14.0	51	10.6	1948
26	65.1	18.4	73.3	22.9	92	33.3	56.9	13.8	51	10.6	1953
27	65.6	18.7	74.0	23.3	92	33.3	57.2	14.0	50	10.0	1953
28	65.9	18.8	74.5	23.6	91	32.8	57.4	14.1	52	11.1	1969
29	64.9	18.3	73.2	22.9	88	31.1	56.6	13.7	52	11.1	1952*
30	64.3	17.9	72.9	22.7	86	30.0	55.8	13.2	50	10.0	1950
31											
Monthly	65.4	18.6	73.9	23.3	106	41.1	56.9	13.8	50	10.0	1970*

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

5725 DAILY AVERAGE/EXTREME TEMP MAR 1978

23239

ALAMEDA, CALIFORNIA

1945-1977

OCTOBER

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP		MAXIMUM TEMP				MINIMUM TEMP				
	AVERAGE		AVERAGE		EXTREME		AVERAGE		EXTREME		
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	
1	64.6	18.1	72.8	22.7	90	32.2	56.3	13.5	48	8.9	1950
2	64.1	17.8	72.6	22.6	86	30.0	55.7	13.2	50	10.0	1946
3	64.2	17.9	72.9	22.7	88	31.1	55.4	13.0	52	11.1	1965*
4	63.7	17.6	72.3	22.4	88	31.1	55.1	12.8	50	10.0	1949
5	64.0	17.8	72.3	22.4	86	30.0	55.7	13.2	52	11.1	1970*
6	64.0	17.8	72.6	22.6	87	30.6	55.4	13.0	50	10.0	1949
7	64.1	17.8	72.8	22.7	88	31.1	55.5	13.1	50	10.0	1970
8	64.5	18.1	72.9	22.7	86	30.0	56.1	13.4	52	11.1	1973*
9	63.6	17.6	71.4	21.9	89	31.7	55.7	13.2	53	11.7	1973*
10	63.5	17.5	71.3	21.8	85	29.4	55.7	13.2	49	9.4	1968
11	63.8	17.7	71.5	21.9	87	30.6	56.1	13.4	51	10.6	1970*
12	64.7	18.2	73.6	23.1	91	32.8	55.7	13.2	52	11.1	1969*
13	64.4	18.0	73.1	22.8	88	31.1	55.8	13.2	52	11.1	1969*
14	63.1	17.3	71.0	21.7	90	32.2	55.2	12.9	50	10.0	1966
15	62.9	17.2	70.7	21.5	90	32.2	55.2	12.9	49	9.4	1966
16	63.9	17.7	72.4	22.4	88	31.1	55.4	13.0	50	10.0	1970
17	63.0	17.2	71.1	21.7	86	30.0	54.6	12.7	50	10.0	1971*
18	62.1	16.7	69.5	20.8	82	27.8	54.7	12.6	47	8.3	1949
19	62.3	16.8	70.0	21.1	84	28.9	54.6	12.6	48	8.9	1949
20	62.4	16.9	70.3	21.3	85	29.4	54.6	12.6	44	6.7	1949
21	62.5	16.9	70.7	21.5	85	29.4	54.4	12.4	46	7.8	1949
22	61.7	16.5	69.1	20.6	85	29.4	54.2	12.3	48	8.9	1966*
23	61.5	16.4	68.7	20.4	85	29.4	54.4	12.4	47	8.3	1949
24	62.8	17.1	70.9	21.6	89	31.7	54.8	12.7	47	8.3	1956
25	61.4	16.3	68.9	20.5	84	28.9	53.8	12.1	48	8.9	1949
26	61.2	16.2	68.5	20.3	85	29.4	53.9	12.2	48	8.9	1949
27	61.0	16.1	68.6	20.3	77	25.0	53.4	11.9	47	8.3	1946
28	60.8	16.0	68.6	20.3	77	25.0	53.0	11.7	44	6.7	1946
29	61.5	16.4	69.5	20.8	82	27.8	53.6	12.0	47	8.3	1971*
30	61.0	16.1	68.8	20.4	82	27.8	53.3	11.8	44	6.7	1946
31	60.8	16.0	69.2	20.7	90	32.2	52.4	11.3	47	8.3	1956
Monthly	62.9	17.2	70.9	21.6	91	32.8	54.8	12.7	44	6.7	1949*

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

23239

ALAMEDA, CALIFORNIA

1945-1977

NOVEMBER

STATION

STATION NAME

YEARS

MONTH

5725 DAILY AVERAGE/EXTREME TEMP MAR 1978

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		EXTREME		AVERAGE		MINIMUM TEMP		DATE
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	
1	60.1	15.6	67.3	19.6	82	27.8	1967*		52.9	11.6	47	8.3	1963*
2	60.9	16.1	68.8	20.4	83	28.3	1967		53.0	11.7	47	8.3	1952
3	60.2	15.7	67.0	19.4	85	29.4	1950		53.3	11.8	48	8.9	1971
4	60.2	15.7	67.5	19.7	76	24.4	1976*		52.8	11.6	47	8.3	1973*
5	59.8	15.4	66.8	19.3	77	25.0	1961*		52.8	11.6	45	7.2	1946
6	59.2	15.1	66.3	19.1	75	23.9	1976		52.2	11.2	48	8.9	1975*
7	59.2	15.1	66.3	19.1	83	28.3	1955		52.2	11.2	46	7.8	1945
8	59.8	15.4	66.8	19.3	81	27.2	1955		52.9	11.6	45	7.2	1945
9	59.1	15.1	65.7	18.7	78	25.6	1950		52.4	11.3	46	7.8	1975
10	59.0	15.0	65.6	18.7	78	25.6	1955		52.3	11.3	46	7.8	1964*
11	58.1	14.5	64.5	18.1	75	23.9	1969		51.7	10.9	46	7.8	1975*
12	57.5	14.2	63.6	17.6	73	22.8	1961		51.5	10.8	44	6.7	1946
13	56.9	13.8	62.5	16.9	72	22.2	1969		51.2	10.7	46	7.8	1964*
14	56.4	13.6	61.8	16.6	72	22.2	1970		50.9	10.5	42	5.6	1964
15	56.2	13.4	61.5	16.4	70	21.1	1949		50.8	10.4	45	7.2	1964*
16	56.1	13.4	62.1	16.7	73	22.8	1967		50.0	10.0	42	5.6	1958
17	55.8	13.2	62.3	16.8	72	22.2	1956		49.2	9.6	40	4.4	1958
18	55.9	13.3	62.5	16.9	72	22.2	1971		49.3	9.6	43	6.1	1975*
19	55.6	13.1	61.8	16.6	70	21.1	1949		49.4	9.7	40	4.4	1977
20	55.0	12.8	61.3	16.3	71	21.7	1959		48.8	9.3	41	5.0	1961
21	55.1	12.8	61.6	16.4	71	21.7	1957		48.5	9.2	42	5.6	1964
22	55.1	12.8	61.4	16.3	75	23.9	1959		48.8	9.3	41	5.0	1947
23	55.0	12.8	61.7	16.5	73	22.8	1959		48.3	9.1	39	3.9	1947
24	55.3	12.9	61.8	16.6	75	23.9	1959		48.7	9.3	42	5.6	1947
25	54.7	12.6	61.3	16.3	77	25.0	1975		48.1	8.9	42	5.6	1966*
26	55.1	12.8	61.8	16.6	74	23.3	1959		48.4	9.1	41	5.0	1952
27	54.3	12.4	60.3	15.7	72	22.2	1969*		48.3	9.1	42	5.6	1948
28	54.5	12.5	61.0	16.1	72	22.2	1969		48.0	8.9	38	3.3	1952
29	54.0	12.2	60.3	15.7	73	22.8	1969		47.6	8.7	42	5.6	1976
30	54.1	12.3	60.2	15.7	70	21.1	1977		48.1	8.9	42	5.6	1976*
31													
Monthly	56.9	13.8	63.4	17.4	85	29.4	1950		50.4	10.2	38	3.3	1952

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT
ASHEVILLE, NORTH CAROLINA

DAILY AVERAGE/EXTREME TEMPERATURES

23239

ALAMEDA, CALIFORNIA

1945-1977

DECEMBER

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		EXTREME		AVERAGE		MINIMUM TEMP		DATE
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	
1	54.1	12.3	59.8	15.4	71	21.7	1959	21.7	40.3	9.1	43	6.1	1976
2	53.5	11.9	59.5	15.3	69	20.6	1969*	20.6	47.5	8.6	43	6.1	1976*
3	53.8	12.1	59.6	15.3	72	22.2	1958	22.2	47.9	8.8	42	5.6	1965*
4	53.2	11.8	58.5	14.7	70	21.1	1959	21.1	47.8	8.8	40	4.4	1963
5	53.0	11.7	58.3	14.6	68	20.0	1959	20.0	47.7	8.7	36	2.2	1972
6	52.1	11.2	57.6	14.2	67	19.4	1976	19.4	46.6	8.1	39	3.9	1972
7	52.2	11.2	57.8	14.3	65	18.3	1973*	18.3	46.6	8.1	38	3.3	1972
8	51.8	11.0	57.6	14.2	68	20.0	1973	20.0	46.0	7.8	29	-1.7	1972
9	51.3	10.7	57.0	13.9	65	18.3	1950	18.3	45.5	7.5	27	-2.8	1972
10	51.1	10.6	56.5	13.6	68	20.0	1958	20.0	45.7	7.6	30	-1.1	1972
11	51.5	10.8	57.0	13.9	71	21.7	1958	21.7	46.0	7.8	31	-0.6	1972
12	50.9	10.5	56.6	13.7	72	22.2	1958	22.2	45.2	7.3	34	1.1	1972
13	50.1	10.1	55.3	12.9	71	21.7	1958	21.7	45.0	7.2	32	0.0	1972
14	50.4	10.2	55.6	13.1	66	18.9	1958	18.9	45.1	7.3	32	0.0	1972
15	50.3	10.2	55.2	12.9	63	17.2	1976*	17.2	45.4	7.4	34	1.1	1971
16	50.4	10.2	56.1	13.4	64	17.8	1969	17.8	44.8	7.1	34	1.1	1971
17	51.2	10.7	57.0	13.9	66	18.9	1958*	18.9	45.4	7.4	36	2.2	1965
18	51.0	10.6	56.5	13.6	64	17.8	1958	17.8	45.6	7.6	37	2.8	1971
19	50.7	10.4	55.8	13.2	64	17.8	1950	17.8	45.5	7.5	35	1.7	1971
20	50.1	10.1	54.8	12.7	65	18.3	1969	18.3	45.3	7.4	35	1.7	1967
21	49.9	9.9	55.1	12.8	62	16.7	1969*	16.7	44.7	7.1	34	1.1	1965
22	50.6	10.3	56.0	13.3	64	17.8	1953	17.8	45.2	7.3	37	2.8	1967*
23	50.5	10.3	55.9	13.3	64	17.8	1946	17.8	45.1	7.3	34	1.1	1948
24	50.9	10.5	56.1	13.4	64	17.8	1969*	17.8	45.7	7.6	32	0.0	1948
25	50.8	10.4	55.9	13.3	67	19.4	1967	19.4	45.7	7.6	39	3.9	1962*
26	50.4	10.2	55.6	13.1	68	20.0	1967*	20.0	45.2	7.3	38	3.3	1965
27	50.5	10.3	56.0	13.3	70	21.1	1967*	21.1	44.9	7.2	36	2.2	1971
28	50.6	10.3	56.3	13.5	73	22.8	1967	22.8	44.9	7.2	36	2.2	1971*
29	50.4	10.2	56.1	13.4	64	17.8	1967	17.8	44.7	7.1	39	3.9	1971
30	49.8	9.9	55.5	13.1	64	17.8	1966*	17.8	44.1	6.7	38	3.3	1971
31	48.6	9.2	54.4	12.4	65	18.3	1958	18.3	42.8	6.0	37	2.8	1971*
Monthly	51.1	10.6	56.6	13.7	73	22.8	1967	22.8	45.7	7.6	27	-2.8	1972

*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

EXTREME VALUES

MAXIMUM TEMPERATURE (FROM DAILY OBSERVATIONS)

45-77

ALAMEDA, CALIFORNIA

23239

STATION NAME

YEARS

WHOLE DEGREES FAHRENHEIT

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
43			74	82	69	87	82	81	86	82	79	63	
46	66	65	73	87	80	88	82	88	93	87	68	64	93
47	60	74	76	92	87	90	80	88	90	86		69	
48	72	70		73	76	89	88	85	89	83	74	62	
49	62	61	70	77	89	100	78	78	94	83	76	68	100
50	62	67	77	83	91	84	80	89	91	83	85	66	91
51	63	68	78	70	91	83	84	82	92	88	75	64	92
52	61	67	84	81	85	82	83	82	89	90	78	63	90
53	68	69	78	73	85	92	84	83	90	88	70	70	92
54	62	76	76	82	82	87	90	82	94	90	71	63	94
55	63	66	77	69	86	90	76	84	91	82	83	63	91
56	62	68	71	77	89	89	76	78	88	76	78	68	89
57	63	68	69	84	83	94	84	83	90	73	71	63	94
58	68	69	58	83	87	84	76	84	91	87	74	72	91
59	65	71	80	81	84	86	93	89	83	88	73	71	95
60	63	67	80	81	79	94	83	81	88	85	74	65	94
61	63	70	74	84	74	100	92	79	93	90	77	63	100
62	69	66	70	81	80	90	75	90	84	80	79	65	90
63	63	72	70	70	77	76	90	84	92	78	69	62	92
64	64	76	77	84	73	87	89	88	95	86	73	63	95
65	60	70	76	84	78	83	73	87	86	89	73	60	89
66	69	64	86	88	80	96	89	84	92	90	82	64	96
67	66	70	69	60	82	74	83	82	92	89	83	73	92
68	72	76	80	82	73	85	91	102	97	85	68	60	102
69	60	65	78	78	83	80	81	83	85	87	81	69	87
70	65	73	79	77	94	83	101	90	92	89	72	66	101
71	64	69	72	74	73	83	83	86	106	91	74	60	106
72	57	63	82	78	90	89	100	80	82	85	67	61	100
73	61	65	66	77	87	97	91	82	91	80	66	61	97
74	71	63	70	79	88	85	88	82	90	88	70	63	90
MEAN													
S. D.													
TOTAL OBS.													

NAVWEASERVCOM

5723 Extreme Values Jan 1969

EXTREME VALUES

MAXIMUM TEMPERATURE
(FROM DAILY OBSERVATIONS)

STATION	STATION NAME	YEARS
23239	ALAMEDA, CALIFORNIA	45-77

WHOLE DEGREES FAHRENHEIT

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
	75	68	70	69	96	80	89	86	93	81	77	69	
76	71	73	73	75	100	101	81	85	93	87	76	67	101
77	63	74	72	79	76	84	89	89	82	82	70	62	89

MAXIMUM TEMPERATURE
(FROM DAILY OBSERVATIONS)

45-77

STATION NAME

YEARS

WHOLE DEGREES FAHRENHEIT
/BASED ON LESS THAN FULL MONTHS/

[illegible]

NAVWEASERVCOM

EXTREME VALUES

MINIMUM TEMPERATURE (FROM DAILY OBSERVATIONS)

45-77

ALAMEDA, CALIFORNIA

23239

STATION NAME

STATION

YEARS

WHOLE DEGREES FAHRENHEIT

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
45			41	44	49	50	54	53	52	52	43	38	
46	38	38	41	45	50	51	53	54	52	44	44	40	38
47	35	42	45	48	51	53	52	54	53	51		40	
48	40	38		44	45	54	54	54	51	45	42	32	
49	30	34	42	46	49	51	50	52	52	44	48	37	30
50	32	34	42	45	44	50	52	54	50	48	48	43	32
51	38	38	40	46	50	49	50	53	54	50	43	37	37
52	34	41	40	47	45	50	54	52	52	51	38	40	34
53	41	44	38	43	48	52	51	55	54	50	45	42	38
54	38	42	41	46	50	51	52	52	53	51	42	38	38
55	38	40	41	43	49	49	52	51	50	50	42	40	38
56	40	38	39	44	50	52	52	53	55	47	44	38	38
57	35	38	45	49	52	52	54	54	54	53	45	41	35
58	41	45	43	44	49	55	54	57	54	53	40	45	40
59	40	40	46	50	48	52	54	56	55	53	47	41	40
60	38	44	43	45	47	52	53	53	52	52	45	38	36
61	34	45	44	44	48	53	54	53	52	48	41	39	34
62	33	36	43	48	50	50	53	53	53	53	43	39	33
63	36	49	41	43	48	52	54	52	54	50	44	36	36
64	40	38	40	44	42	50	51	53	51	50	42	38	38
65	37	42	44	43	46	49	48	52	52	51	44	34	34
66	35	38	36	48	48	48	51	51	52	48	42	36	35
67	38	42	44	38	45	49	51	49	53	51	47	35	35
68	31	40	49	44	46	51	53	58	53	49	42	35	31
69	37	43	43	46	45	50	49	52	52	52	42	40	37
70	40	45	43	44	47	52	50	49	50	49	48	42	40
71	35	37	37	40	46	49	52	55	54	47	47	34	34
72	32	37	42	44	48	50	53	40	54	49	47	27	27
73	40	46	46	48	50	53	51	51	52	52	45	44	40
74	38	45	44	49	49	51	54	54	54	52	46	42	38
MEAN													
S. D.													
TOTAL OBS.													

MINIMUM TEMPERATURE
(FROM DAILY OBSERVATIONS)

ALAMEDA, CALIFORNIA

23239

STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE	STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE
STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE	STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE

YEARS

5723 Extreme Values Jan 1969

NAVWEASERVCOM

MINIMUM TEMPERATURE
(FROM DAILY OBSERVATIONS)

STATION	STATION NAME
23239	ALAMEDA, CALIFORNIA

45-77

YEARS

WHOLE DEGREES FAHRENHEIT
/BASED ON LESS THAN FULL MONTHS/

[illegible]

NAVWEASERVCOM

PSYCHROMETRIC SUMMARY

5005

PSYCHROMETRIC SUMMARY JAN 68

JAN
MONTH
PAGE 1
HOURS (L.S.T.)

73-77
YEARS

73-77

ALAMEDA, CALIFORNIA
STATION NAME

23239
STATION

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL		TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point	
72/ 71										.1								1	1			
70/ 69									.1									1	1			
68/ 67					.1													1	1			
66/ 65									.1									5	5			
64/ 63			.1				.2	.1	.1									11	11			
62/ 61				.2	.1	.3	.2	.2	.3	.2								20	20			
60/ 59		.2	.2	.4	.3	.6	.2	.2	.3									32	32		2	
58/ 57		.5	.4	.6	.4	.9	.3	.3	.3									48	48		5	
56/ 55	.1	2.6	1.2	2.8	1.4	.5	.1	.1	.1	.1								114	114		3	
54/ 53	1.2	2.4	1.8	3.4	.9	.5	.3	.3	.2	.2								132	132		25	
52/ 51	.2	4.0	3.0	2.9	1.0	.9	.6	.1										156	156		35	
50/ 49	.2	2.8	6.4	3.2	.7	.7	.3											178	178		58	
48/ 47	.4	2.4	6.2	3.3	.6	.2	.3											167	167		88	
46/ 45	.2	4.4	5.2	1.9	.9	.6	.1											166	166		75	
44/ 43	.2	3.1	3.8	1.1	.3	.2												108	108		146	
42/ 41	.1	1.7	2.2	1.3	.3	.2												71	71		182	
40/ 39		1.0	1.0		.1													27	27		152	
38/ 37		.2																2	2		127	
36/ 35																					96	
34/ 33																					28	
32/ 31																					4	
30/ 29																					3	
28/ 27																					49	
26/ 25																					31	
24/ 23																					24	
22/ 21																					12	
20/ 19																					14	
18/ 17																					10	
16/ 15																					4	
14/ 13																					2	
12/ 11																					3	
10/ 9																					5	
TOTAL	3.125	831.521	0	7.7	6.2	2.8	1.1	.6	.1									1240	1240	1240	1240	
Element (X)	ΣX^2	ΣX	\bar{X}	σ_x	No. Obs.	Mean No. of Hours with Temperature												≥ 80 F	≥ 73 F	≥ 67 F	≥ 93 F	Total
Rel. Hum.	6812899	89639	72.3	16.392	1240																	744.0
Dry Bulb	3102677	61673	49.7	5.336	1240																1.8	744.0
Wet Bulb	2578805	56217	45.3	4.931	1240															1.8		744.0
Dew Point	2090541	50065	40.4	7.471	1240															94.8		744.0

NAVWEASERVCOM

PSYCHROMETRIC SUMMARY

5 PSYCHROMETRIC SUMMARY JAN 68

23239 ALAMEDA, CALIFORNIA 73-77 FEB
STATION NAME YEARS MONTH
PAGE 1
HOURS (L.S.T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL		TOTAL	
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
72/ 71						.1	.1	.1	.2									3	3		
70/ 69						.1	.1	.1										3	3		
68/ 67					.1	.1	.1	.1										3	3		
66/ 65					.1	.1	.1	.1										7	7		
64/ 63				.3	.6	.2	.2	.2	.1									12	12		1
62/ 61				.3	.6	.2	.2	.2	.3	.1								23	23		2
60/ 59		.3	1.0	1.0	1.2	.7	.3	.3	.1									67	67		10
58/ 57		.3	2.7	2.0	1.2	.5	.4	.1										90	90		4
56/ 55		3.0	5.3	2.6	1.7	1.0	.4	.2	.1									163	163		33
54/ 53	.1	5.5	6.1	3.1	1.3	.2	.4	.1										189	189		115
52/ 51	.3	9.9	5.4	2.9	1.0	.2	.1											223	223		196
50/ 49	.4	5.7	6.9	2.1	.4	.4	.4											184	184		179
48/ 47	.1	3.0	2.8	2.0	.4	.2												97	97		204
46/ 45		1.1	1.8	.4	.1	.1												38	38		183
44/ 43		.4	.6	.4	.4													17	17		143
42/ 41			.4	.4	.1													5	5		98
40/ 39			.1	.1														2	2		26
38/ 37																					9
36/ 35																				3	33
34/ 33																					24
32/ 31																					19
30/ 29																					9
28/ 27																					8
26/ 25																					1
24/ 23																					4
22/ 21																					10
20/ 19																					4
18/ 17																					1
16/ 15																					1
TOTAL	.929	.433	.016	.6	9.0	4.7	2.8	.9	.7									1128	1128	1128	1128

Element (X)	Mean No. of Hours with Temperature						Total
	≤0 F	≤32 F	≥67 F	≥80 F	≥93 F	Total	
Rel. Hum.			6.6			672.0	
Dry Bulb						672.0	
Wet Bulb		34.0				672.0	
Dew Point						672.0	

Element (X)	ΣX ²	ΣX	\bar{X}	σ_x	No. Obs.	Mean No. of Hours with Temperature					Total
Rel. Hum.	6497073	83925	74.4	14.980	1128	≤0 F	≤32 F	≥67 F	≥73 F	≥93 F	672.0
Dry Bulb	3184466	59720	52.9	4.487	1128			6.6			672.0
Wet Bulb	2683551	34853	48.6	4.010	1128						672.0
Dew Point	2263913	50053	44.4	6.311	1128		34.0				672.0

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PSYCHROMETRIC SUMMARY JAN 68

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL D.B./W.B.	TOTAL	
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31		Dry Bulb	Wet Bulb
74/ 73									.2									2		
70/ 69							.1	.1	.1									4		
68/ 67							.1	.2	.3									5		
66/ 65				.1	.2	.1	.2	.3	.4	.1								12		
64/ 63			.2	.3	.4	.2	.3	.4	.5	.2								18		
62/ 61		.2	.3	.4	.5	.3	.4	.5	.6	.3								39		
60/ 59		.3	.4	.5	.6	.4	.5	.6	.7	.4								78	1	
58/ 57	.2	.3	.4	.5	.6	.5	.6	.7	.8	.5								113	10	
56/ 55	.3	.4	.5	.6	.7	.6	.7	.8	.9	.6								158	27	10
54/ 53	.4	.5	.6	.7	.8	.7	.8	.9	1.0	.7								179	48	33
52/ 51	.5	.6	.7	.8	.9	.8	.9	1.0	1.1	.8								196	96	41
50/ 49	.6	.7	.8	.9	1.0	.9	1.0	1.1	1.2	.9								224	144	57
48/ 47	.7	.8	.9	1.0	1.1	1.0	1.1	1.2	1.3	1.0								219	196	79
46/ 45	.8	.9	1.0	1.1	1.2	1.1	1.2	1.3	1.4	1.1								102	235	124
44/ 43	.9	1.0	1.1	1.2	1.3	1.2	1.3	1.4	1.5	1.2								53	217	143
42/ 41	1.0	1.1	1.2	1.3	1.4	1.3	1.4	1.5	1.6	1.3								23	120	171
40/ 39	1.1	1.2	1.3	1.4	1.5	1.4	1.5	1.6	1.7	1.4								6	75	155
38/ 37	1.2	1.3	1.4	1.5	1.6	1.5	1.6	1.7	1.8	1.5								5	55	91
36/ 35	1.3	1.4	1.5	1.6	1.7	1.6	1.7	1.8	1.9	1.6								12	12	93
34/ 33	1.4	1.5	1.6	1.7	1.8	1.7	1.8	1.9	2.0	1.7								2	2	68
32/ 31	1.5	1.6	1.7	1.8	1.9	1.8	1.9	2.0	2.1	1.8										62
30/ 29	1.6	1.7	1.8	1.9	2.0	1.9	2.0	2.1	2.2	1.9										21
28/ 27	1.7	1.8	1.9	2.0	2.1	2.0	2.1	2.2	2.3	2.0										13
26/ 25	1.8	1.9	2.0	2.1	2.2	2.1	2.2	2.3	2.4	2.1										5
24/ 23	1.9	2.0	2.1	2.2	2.3	2.2	2.3	2.4	2.5	2.2										2
22/ 21	2.0	2.1	2.2	2.3	2.4	2.3	2.4	2.5	2.6	2.3										3
20/ 19	2.1	2.2	2.3	2.4	2.5	2.4	2.5	2.6	2.7	2.4										1
18/ 17	2.2	2.3	2.4	2.5	2.6	2.5	2.6	2.7	2.8	2.5										2
16/ 15	2.3	2.4	2.5	2.6	2.7	2.6	2.7	2.8	2.9	2.6										2
14/ 13	2.4	2.5	2.6	2.7	2.8	2.7	2.8	2.9	3.0	2.7										2
12/ 11	2.5	2.6	2.7	2.8	2.9	2.8	2.9	3.0	3.1	2.8										1
9/ 7	2.6	2.7	2.8	2.9	3.0	2.9	3.0	3.1	3.2	2.9										1
TOTAL	1.916	7.31	1.022	9.14	8.0	4.1	1.9	0.9	0.3									1240	1240	1240
Element (X)		ΣX ²	ΣX	ΣX	ΣX	ΣX	ΣX	ΣX	ΣX	ΣX	No. Obs.	Mean No. of Hours with Temperature					TOTAL			
Rel. Hum.		6280347	63985	63985	63985	63985	63985	63985	63985	63985	1240	≥ 80 F					Total			
Dry Bulb		3309248	63690	63690	63690	63690	63690	63690	63690	63690	1240	≥ 73 F					744.0			
Wet Bulb		288647	39281	39281	39281	39281	39281	39281	39281	39281	1240	≥ 67 F					744.0			
Dew Point		2288223	32543	32543	32543	32543	32543	32543	32543	32543	1240	≥ 60 F					744.0			

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Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL		TOTAL		Dew Point
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥31	D.B./W.B.	Dry Bulb	Wet Bulb			
78/ 77										.1	.1	.1	.2	.1				2	7	2			
76/ 75										.1	.1	.1	.1	.1				6	6	7			
74/ 73										.2	.2	.2	.1	.1				17	17	6			
72/ 71										.3	.3	.3	.1	.1				18	18	17			
70/ 69										.2	.2	.2	.1	.1				17	17	17			
68/ 67										.6	.6	.6	.1	.1				28	28	49			
66/ 65										.4	.4	.4	.1	.1				49	49	84			
64/ 63										.7	.7	.7	.2	.2				84	84	97			
62/ 61										2.1	2.1	2.1	.3	.3				97	97	11			
60/ 59										3.1	3.1	3.1	.6	.6				117	117	42			
58/ 57										4.1	4.1	4.1	.7	.7				155	155	83			
56/ 55										5.1	5.1	5.1	.9	.9				136	136	131			
54/ 53										6.1	6.1	6.1	.2	.2				239	239	184			
52/ 51										7.1	7.1	7.1	.6	.6				132	132	194			
50/ 49										8.1	8.1	8.1	.2	.2				69	69	267			
48/ 47										9.1	9.1	9.1	.1	.1				18	18	178			
46/ 45										10.1	10.1	10.1	.2	.2				9	9	55			
44/ 43										11.1	11.1	11.1	.6	.6				38	38	149			
42/ 41										12.1	12.1	12.1	.2	.2				6	6	102			
40/ 39										13.1	13.1	13.1	.1	.1				6	6	72			
38/ 37										14.1	14.1	14.1	.2	.2				30	30	30			
36/ 35										15.1	15.1	15.1	.6	.6				28	28	14			
34/ 33										16.1	16.1	16.1	.2	.2				16	16	16			
32/ 31										17.1	17.1	17.1	.1	.1				10	10	10			
30/ 29										18.1	18.1	18.1	.2	.2				10	10	5			
28/ 27										19.1	19.1	19.1	.6	.6				1	1	1			
26/ 25										20.1	20.1	20.1	.2	.2				2	2	2			
24/ 23										21.1	21.1	21.1	.1	.1				1	1	1			
22/ 21										22.1	22.1	22.1	.2	.2				1	1	1			
20/ 19										23.1	23.1	23.1	.6	.6				1	1	1			
18/ 17										24.1	24.1	24.1	.2	.2				1	1	1			
16/ 15										25.1	25.1	25.1	.1	.1				1	1	1			
TOTAL										26.1	26.1	26.1	.2	.2				1200	1200	1200			

Element (X)	ΣX	X̄	σ _x	No. Obs.	Mean No. of Hours with Temperature				Total	
Rel. Hum.	5974341	74589	19.703	1200	≤ 67 F	≥ 67 F	≥ 80 F	≥ 93 F		720.0
Dry Bulb	3739249	66397	6.008	1200	40.2				9.0	720.0
Wet Bulb	2948119	59281	4.041	1200						720.0
Dew Point	2307702	52130	5.872	1200	36.0					720.0

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Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL		TOTAL		Dew Point							
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb										
94/ 93																		2	2											
92/ 91																		3	3											
90/ 89																		1	1											
88/ 87																		2	2											
86/ 85																		1	1											
84/ 83																		2	2											
82/ 81																		3	3											
80/ 79																		5	5											
78/ 77																		7	7											
76/ 75																		7	7											
74/ 73																		11	11											
72/ 71																		17	17											
70/ 69																		14	14											
68/ 67																		24	24											
66/ 65																		43	43											
64/ 63																		86	86											
62/ 61																		97	97											
60/ 59																		141	141											
58/ 57																		126	126											
56/ 55																		156	156											
54/ 53																		206	206											
52/ 51																		213	213											
50/ 49																		59	59											
48/ 47																		8	8											
46/ 45																		1	1											
44/ 43																														
42/ 41																														
40/ 39																														
38/ 37																														
36/ 35																														
34/ 33																														
32/ 31																														
30/ 29																														
28/ 27																														
26/ 25																														
24/ 23																														
Element (X)	Mean No. of Hours with Temperature																		No. Obs.		σ _x		Σ _x		Σ _x ²		TOTAL			
Rel. Hum.																									≥ 80 F		≥ 93 F		Total	
Dry Bulb																														
Wet Bulb																														
Dew Point																														

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Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL		TOTAL											
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point											
100/ 99																	.2	2	2													
98/ 97																	.2	2	2													
96/ 93														.1	.1	.2		4	4													
92/ 91														.1	.1	.1	.1	4	4													
90/ 89												.1	.1	.2	.2			7	7													
88/ 87											.1	.2	.1	.1				5	5													
86/ 85									.1	.1	.2	.3	.2	.1				3	3													
84/ 83								.2	.2	.2	.3	.2						13	13													
82/ 81							.1	.2	.2	.2	.1							6	6													
80/ 79							.3	.3	.4	.1	.1							4	4													
78/ 77							.3	.3	.4	.1	.1							12	12													
76/ 75							.8	.4	.4	.3	.1	.1						11	11													
74/ 73						.1	.7	.5	.4	.3								21	21													
72/ 71						.1	.7	.5	.4	.3								21	21													
70/ 69						.2	.8	1.2	.3	.1								43	43	1												
68/ 67						.7	1.4	1.3	.2									54	54	11												
66/ 65						1.2	2.0	1.0	.2									92	92	14												
64/ 63						.5	3.5	1.7	.3	.1								105	105	43												
62/ 61						1.2	4.8	2.1	.5									101	101	52	1											
60/ 59						4.2	6.4	3.6	.2									132	132	100	14											
58/ 57						6.0	5.3	4.2										187	187	176	38											
56/ 55						5.4	3.7	1.9	.3									193	193	238	126											
54/ 53						.7	1.2	.7										136	136	224	213											
52/ 51																		42	42	221	254											
50/ 49																				84	181											
48/ 47																				31	151											
46/ 45																				5	103											
44/ 43																					50											
42/ 41																					40											
40/ 39																					19											
38/ 37																					4											
36/ 35																					1											
30/ 29																					1											
Element (X)	ΣX^2																		ΣX		\bar{X}		σ_x		No. Obs.		Mean No. of Hours with Temperature					
Rel. Hum.																							≤ 0 F		≥ 73 F		≥ 80 F		≥ 93 F		Total	
Dry Bulb																																
Wet Bulb																																
Dew Point																																

Mean No. of Hours with Temperature

No. Obs.

σ_x

\bar{x}

$\sum x$

$\sum x^2$

Element (X)

Rel. Hum.

Dry Bulb

Wet Bulb

Dew Point

Total

≥ 80 F

≥ 93 F

≥ 73 F

≤ 67 F

≤ 32 F

≤ 0 F

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Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL D.B./W.B.	TOTAL Wet Bulb	TOTAL Dew Point
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31			
90/ 89																		1	1	
86/ 85																		1	1	
84/ 83																		5	5	
82/ 81																		5	5	
80/ 79																		11	11	
78/ 77																		9	9	
76/ 75																		11	11	
74/ 73																		30	30	
72/ 71																		42	42	
70/ 69																		59	59	3
68/ 67																		73	73	5
66/ 65																		90	90	30
64/ 63																		130	130	75
62/ 61																		150	150	111
60/ 59																		231	231	224
58/ 57																		218	218	251
56/ 55																		131	131	239
54/ 53																		42	42	160
52/ 51																		1	1	84
50/ 49																				4
48/ 47																				49
46/ 45																				2
TOTAL																		1240	1240	1240

Element (X)	Rel. Hum.	Dry Bulb	Wet Bulb	Dew Point	Mean No. of Hours with Temperature							Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
					≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

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Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL	Dew Point				
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb					
90/ 89														.1				5	5						
88/ 87													.1	.2				3	3						
86/ 85																		1	1						
84/ 83														.2				6	6						
82/ 81																		9	9						
80/ 79																		7	7						
78/ 77																		10	10						
76/ 75																		17	17						
74/ 73																		16	16						
72/ 71																		36	36						
70/ 69																		51	51	2					
68/ 67																		73	73	6					
66/ 65																		103	103	23					
64/ 63																		128	128	59					
62/ 61																		139	139	24					
60/ 59																		198	198	67					
58/ 57																		208	208	182					
56/ 55																		159	159	203					
54/ 53																		30	30	282					
52/ 51																		1	1	51					
50/ 49																				3					
48/ 47																				13					
46/ 45																				4					
44/ 43																				3					
42/ 41																				1					
40/ 39																				1					
TOTAL	2-326	231	216	911	6	4	4	2	9	1	2	1	2	1	1	1	1	1200	1200	1200					
Element (X)	Mean No. of Hours with Temperature																		Total						
Rel. Hum.	7270213	91887	76.6	13.975	1200														≥ 0 F	≥ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	720.0
Dry Bulb	4677313	74543	62.1	6.228	1200														140.4	17.4					720.0
Wet Bulb	3966623	68875	57.4	3.353	1200														4.6					720.0	
Dew Point	3510628	64794	54.0	3.173	1200																		720.0		

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Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL		TOTAL	Wet Bulb	Dew Point
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb			
86/ 85												.1	.4	.2				2	2	2		
84/ 83												.2	.1					6	6	6		
82/ 81												.1	.2	.1				4	4	4		
80/ 79												.2	.1					7	7	7		
78/ 77												.2	.2	.1				12	12	12		
76/ 75								.6	.3	.2	.2	.1	.2	.1				15	15	15		
74/ 73							.1	.9	.1	.2	.1	.2	.1					27	27	27		
72/ 71					.1	.4	.7	1.1	.3	.1	.1	.1						35	35	35		
70/ 69					.4	1.0	.7	1.0	.2	.2	.1	.1						31	31	31	1	
68/ 67			.1	.4	2.2	1.9	.4	.2	.4	.2	.1	.1						66	66	66	2	
66/ 65			.2	1.9	3.0	.3	.3	.2	.3	.1	.2							75	75	75	35	
64/ 63		.1	.9	3.0	2.8	.6	.2	.1	.1									96	96	96	75	
62/ 61		1.4	3.4	4.0	1.3	.3	.1	.3										135	135	135	4	
60/ 59		3.5	6.6	2.5	1.0	.3	.2	.2										177	177	177	22	
58/ 57	.1	5.8	8.3	1.9	.4	.1	.1											206	206	206	51	
56/ 55	.1	7.0	8.1	1.5	.2	.3												213	213	213	183	
54/ 53	.2	4.8	3.5	.4	.1	.2												113	113	113	259	
52/ 51		.4	.9	.2														18	18	18	293	
50/ 49		.1		.1														2	2	2	56	
48/ 47																					24	
46/ 45																					8	
44/ 43																					1	
42/ 41																						
40/ 39																						
38/ 37																						
36/ 35																						
34/ 33																						
32/ 31																						
30/ 29																						
28/ 27																						
26/ 25																						
24/ 23																						
TOTAL	.323	.131	.916	.012	.2	6.1	4.0	2.7	.9	1.2	.6	.6	.2					1240	1240	1240	1240	

Element (X)	ΣX ²	ΣX	X̄	σ _x	No. Obs.	Mean No. of Hours with Temperature				Total	
Rel. Hum.	6923916	90682	73.1	13.411	1240	≥ 73 F	≥ 80 F	≥ 93 F			
Dry Bulb	4620379	79303	60.7	6.182	1240	123.0	9.0				
Wet Bulb	3822744	68702	55.4	3.629	1240	.6					
Dew Point	3278020	63902	51.2	4.580	1240	5.4					

Element (X)	ΣX	X̄	σ _x	No. Obs.	Mean No. of Hours with Temperature				Total
Rel. Hum.	90682	73.1	13.411	1240	≤ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total
Dry Bulb	73303	60.7	6.182	1240	123.0	43.8	9.0		744.0
Wet Bulb	68702	55.4	3.829	1240	.6				744.0
Dew Point	63502	51.2	4.580	1240	5.4				744.0

PSYCHROMETRIC SUMMARY

23239

ALAMEDA, CALIFORNIA

73-77

NOV

STATION NAME

YEARS

MONTH

PAGE 1

HOURS (L.S.T.)

5 PSYCHROMETRIC SUMMARY JAN 68

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL		TOTAL										
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Wet Bulb	Dew Point										
76/ 75														.2				2	2											
74/ 73																		7	7											
72/ 71																		5	5											
70/ 69																		9	9											
68/ 67																		17	17											
66/ 65																		36	36											
64/ 63																		37	37											
62/ 61																		91	91	4										
60/ 59																		116	116	35										
58/ 57																		157	157	89										
56/ 55																		203	203	116										
54/ 53																		186	186	189										
52/ 51																		148	148	115										
50/ 49																		96	96	168										
48/ 47																		49	49	132										
46/ 45																		31	31	112										
44/ 43																		8	8	52										
42/ 41																		1	1	38										
40/ 39																		1	1	26										
38/ 37																				14										
36/ 35																				7										
34/ 33																				2										
32/ 31																														
30/ 29																														
28/ 27																														
26/ 25																														
24/ 23																														
22/ 21																														
20/ 19																														
18/ 17																														
16/ 15																														
14/ 13																														
12/ 11																														
10/ 9																														
Element (X)	ΣX ²																	ΣX	Mean No. of Hours with Temperature					Total						
Rel. Hum.																			≤ 0 F					≥ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total	
Dry Bulb																														
Wet Bulb																														
Dew Point																														

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PSYCHROMETRIC SUMMARY

23239 ALAMEDA, CALIFORNIA

73-77

DEC

STATION NAME

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MONTH

PAGE 1

HOURS (L.S.T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL		TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
64/ 63						.3	.2	.1	.1	.1								10	10		
62/ 61						.5	.1	.2	.1	.1								15	15		
60/ 59						.8	.2	.1	.1	.1								33	33		
58/ 57						.6	.1	.1	.1									90	90	3	1
56/ 55	.9	3.0	3.0	3.1	1.7	.9	.7	.4										170	170	38	26
54/ 53	.7	4.8	4.3	3.2	1.4	.2	.5	.3										191	191	94	39
52/ 51	1.0	6.7	7.0	2.9	.7	.3	.5											237	237	174	80
50/ 49	.5	4.9	7.1	1.8	1.0	.4	.3											198	198	216	115
48/ 47		3.1	3.3	1.9	.8	.3	.3											120	120	230	156
46/ 45	.2	2.5	4.4	.8	.7	.4												113	113	172	145
44/ 43	.2	.4	1.9	1.0	.1	.1												46	46	118	161
42/ 41		.2	1.0	.2														16	16	104	130
40/ 39			.1															1	1	54	98
38/ 37																				29	99
36/ 35																				8	57
34/ 33																					29
32/ 31																					17
30/ 29																					23
28/ 27																					14
26/ 25																					11
24/ 23																					8
22/ 21																					12
20/ 19																					8
18/ 17																					5
16/ 15																					4
14/ 13																					1
12/ 11																					1
TOTAL	3.5	27.0	34.2	17.2	8.6	4.8	3.0	1.1	.2	.2								1240	1240	1240	1240

Element (X)	ΣX ²	ΣX	X̄	σ _x	No. Obs.	Mean No. of Hours with Temperature					Total	
Ref. Hum.	7174120	92088	74.3	16.449	1240	≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total
Dry Bulb	3313912	63882	51.5	4.294	1240							744.0
Wet Bulb	2799932	58676	47.3	4.347	1240							744.0
Dew Point	2337853	53067	42.8	7.342	1240							744.0

Element (X)	ΣX^2	ΣX	\bar{X}	σ_x	No. Obs.	Mean No. of Hours with Temperature					Total
Rel. Hum.	7174120	92088	74.3	16.449	1240	≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 93 F	744.0
Dry Bulb	3313912	63882	51.5	4.294	1240						744.0
Wet Bulb	2799932	58676	47.3	4.347	1240						744.0
Dew Point	2337853	53067	42.8	7.342	1240						744.0

PSYCHROMETRIC SUMMARY

23239 ALAMEDA, CALIFORNIA

73-77

ALL

MONTH

PAGE 1

HOURS (L.S.T.)

YEARS

STATION NAME

STATION

5 PSYCHROMETRIC SUMMARY JAN 68

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL		Wet Bulb	Dew Point
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥31	D.B./W.B.		
100/ 99																		2	2	
98/ 97																		2	2	
94/ 93																		6	6	
92/ 91																		8	8	
90/ 89											.0	.0	.0	.0	.0			13	13	
88/ 87										.0	.0	.0	.0	.0	.0			12	12	
86/ 85									.0	.0	.0	.0	.0	.0	.0			14	14	
84/ 83									.0	.0	.1	.0	.0	.0	.0			34	34	
82/ 81									.0	.1	.0	.0	.0	.0	.0			35	35	
80/ 79						.0			.0	.1	.0	.0	.0	.0	.0			36	36	
78/ 77						.0	.0		.0	.1	.0	.0	.0	.0	.0			63	63	
76/ 75						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			79	79	
74/ 73						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			139	139	
72/ 71						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			210	210	
70/ 69						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			288	288	8
68/ 67						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			407	407	29
66/ 65						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			610	610	97
64/ 63						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			806	806	263
62/ 61						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			1028	1028	486
60/ 59						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			1459	1459	903
58/ 57						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			1801	1801	1388
56/ 55						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			1994	1994	1837
54/ 53						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			1603	1603	2019
52/ 51						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			1504	1504	1893
50/ 49						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			1068	1068	1569
48/ 47						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			612	612	1440
46/ 45						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			420	420	1102
44/ 43						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			211	211	626
42/ 41						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			99	99	480
40/ 39						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			36	36	277
38/ 37						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0			2	2	131
36/ 35						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0					48
34/ 33						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0					3
32/ 31						.0	.0	.0	.1	.1	.0	.0	.0	.0	.0					3
Element (X)	Σ X																Σ X		Total	
Rel. Hum.																				
Dry Bulb																				
Wet Bulb																				
Dew Point																				

MEANS AND STANDARD DEVIATIONS

5707 MEANS AND STANDARD DEVIATIONS JAN 68

PRINTED BY THE STANDARD REGISTER COMPANY, U. S. A.

DRY-BULB TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

73-77

ALAMEDA, CALIFORNIA

23239

STATION NAME

STATION

YEARS

HRS.(L.S.T.)	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
01	MEAN S. D. TOTAL OBS	47.2 3.963 155	50.6 2.827 141	50.3 3.031 155	51.7 3.159 150	52.9 2.925 154	56.1 3.452 150	57.0 2.401 155	58.1 2.434 155	58.5 3.067 150	56.9 2.939 155	53.1 3.760 150	53.5 4.768 1825
04	MEAN S. D. TOTAL OBS	46.3 4.260 155	49.8 2.997 141	49.5 3.177 155	50.9 3.255 150	52.5 3.040 155	55.6 3.203 150	56.4 2.338 155	57.6 2.540 155	58.0 2.809 150	56.4 2.687 155	52.1 3.773 150	52.8 4.898 1826
07	MEAN S. D. TOTAL OBS	45.8 4.238 155	49.1 3.184 141	49.3 3.372 155	52.5 3.680 150	55.6 4.358 155	58.9 5.179 150	58.6 3.014 155	58.9 3.237 155	58.6 2.930 150	56.5 3.001 155	51.4 3.768 150	53.6 5.925 1826
10	MEAN S. D. TOTAL OBS	50.0 4.186 155	53.1 2.827 141	54.1 3.490 155	57.7 4.601 150	61.0 5.672 155	64.5 6.924 150	63.9 4.131 155	64.1 4.652 155	64.2 4.872 150	63.0 4.342 155	56.9 4.050 150	58.7 6.899 1826
13	MEAN S. D. TOTAL OBS	53.9 4.424 155	57.3 3.831 141	58.0 4.549 155	62.1 6.185 150	65.1 7.378 155	69.1 9.211 150	69.2 5.836 155	69.5 5.553 155	69.9 6.728 150	68.4 5.963 155	60.8 4.853 150	63.3 8.206 1826
16	MEAN S. D. TOTAL OBS	55.1 5.223 155	58.1 4.260 141	57.9 4.505 155	61.1 5.792 150	63.2 6.427 155	67.3 7.584 150	68.1 5.463 155	67.9 4.974 155	67.8 5.939 150	66.6 6.257 155	60.8 5.027 150	62.5 7.269 1826
19	MEAN S. D. TOTAL OBS	50.7 4.148 155	53.8 2.958 141	53.2 3.415 155	55.2 4.277 150	57.3 4.946 155	61.4 6.641 150	61.6 3.700 155	61.1 3.492 155	60.9 4.425 150	59.9 4.356 155	56.0 3.854 150	56.9 5.649 1826
22	MEAN S. D. TOTAL OBS	48.7 3.802 155	51.8 2.682 141	51.5 2.973 155	52.8 3.384 150	54.0 3.424 155	57.2 3.669 150	57.9 2.576 155	58.8 2.624 155	59.0 3.308 150	58.0 3.181 155	54.2 3.594 150	54.5 4.682 1826
ALL HOURS	MEAN S. D. TOTAL OBS	49.7 5.337 1240	52.9 4.487 1128	53.0 4.860 1240	55.5 6.008 1200	57.7 6.753 1239	61.3 7.787 1200	61.6 6.086 1240	62.0 5.813 1240	62.1 6.229 1200	60.7 6.183 1240	55.7 5.357 1200	57.0 7.275 16607

MEANS AND STANDARD DEVIATIONS

WET-BULB TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

ALAMEDA, CALIFORNIA

73-77

23239

STATION NAME		YEARS												
		JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
01	MEAN	43.9	47.6	46.6	47.4	49.2	52.6	54.0	55.5	55.8	53.8	49.2	46.3	50.2
	S. D.	4.669	3.512	4.180	3.267	2.866	2.812	2.381	2.534	2.601	2.834	4.786	4.254	5.195
	TOTAL OBS	155	141	155	150	154	150	155	155	150	155	150	155	1825
04	MEAN	43.3	46.9	45.8	46.8	49.0	52.3	53.6	55.2	55.5	53.3	48.5	45.6	49.7
	S. D.	4.956	3.710	4.299	3.271	3.008	2.793	2.487	2.579	2.492	2.840	4.856	4.622	5.378
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
07	MEAN	42.7	46.2	45.7	47.9	51.0	54.3	55.2	56.2	56.0	53.5	47.9	44.9	50.1
	S. D.	5.006	3.935	4.380	3.810	3.676	3.464	2.581	3.024	2.614	3.151	4.872	4.669	5.996
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
10	MEAN	45.6	48.9	48.4	50.7	53.6	57.0	57.8	58.7	58.6	56.8	51.4	47.8	53.0
	S. D.	4.598	3.798	4.245	3.602	3.708	3.609	2.820	3.142	3.016	3.348	4.730	3.812	5.874
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
13	MEAN	47.6	50.7	50.3	52.5	55.5	58.7	60.0	60.8	60.6	58.6	52.9	49.6	54.8
	S. D.	4.230	3.774	4.106	3.825	3.842	3.797	2.959	3.161	3.050	3.301	4.581	3.501	5.883
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
16	MEAN	48.3	51.2	50.5	52.3	54.7	58.0	59.4	60.2	60.0	57.9	52.9	49.9	54.6
	S. D.	4.521	3.635	3.847	3.676	3.491	3.487	2.699	2.855	2.830	3.412	4.457	3.400	5.457
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
19	MEAN	46.0	49.3	48.0	49.4	51.6	55.0	56.3	57.1	56.7	55.1	50.7	47.7	51.9
	S. D.	4.278	3.580	3.900	3.220	3.145	3.284	2.547	2.752	2.842	2.871	4.498	3.725	5.104
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
22	MEAN	45.1	48.3	47.2	48.1	50.0	53.0	54.6	55.8	56.0	54.2	49.8	46.7	50.7
	S. D.	4.317	3.368	3.891	3.060	2.950	2.834	2.579	2.632	2.645	2.696	4.522	4.001	4.965
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
ALL HOURS	MEAN	45.3	48.6	47.8	49.4	51.8	55.1	56.4	57.4	57.4	55.4	50.4	47.3	51.9
	S. D.	4.932	4.011	4.455	4.042	4.079	4.030	3.501	3.495	3.354	3.629	4.987	4.348	5.821
	TOTAL OBS	1260	1128	1260	1200	1239	1200	1260	1240	1240	1200	1240	1200	14607

NAVWEASERVCOM

MEANS AND STANDARD DEVIATIONS

DEW-POINT TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

73-77

ALAMEDA, CALIFORNIA

29239

STATION	HRS.(L.S.T.)	STATION NAME												ANNUAL
		JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	
01	MEAN	40.0	44.5	42.5	43.1	45.9	49.6	51.6	53.5	53.8	51.1	45.3	42.9	47.0
	S. D.	7.157	5.806	6.626	5.006	3.933	3.772	3.321	3.234	2.964	3.947	7.716	6.843	6.967
	TOTAL OBS	155	141	155	150	154	150	155	155	150	155	150	155	1825
04	MEAN	39.4	44.0	41.6	42.4	45.8	49.6	51.4	53.3	53.5	50.8	44.8	42.2	46.6
	S. D.	7.665	5.698	7.003	5.726	4.146	3.828	3.461	3.222	2.900	4.334	7.851	7.387	7.289
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
07	MEAN	39.0	43.1	41.7	43.3	46.9	50.7	52.6	54.1	54.0	51.0	44.1	41.5	46.9
	S. D.	7.692	6.385	6.966	6.441	4.742	4.280	3.431	3.544	3.064	5.227	7.900	7.508	7.804
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
10	MEAN	40.7	44.6	42.3	43.9	47.3	51.2	53.4	54.9	54.7	52.0	45.9	43.4	47.9
	S. D.	7.690	6.838	7.659	6.626	4.929	4.582	3.545	3.390	3.235	5.299	8.174	7.215	7.747
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
13	MEAN	40.9	44.4	42.5	43.4	47.4	51.0	53.5	54.9	54.3	51.1	45.5	43.2	47.7
	S. D.	7.662	7.169	7.554	7.117	5.239	4.945	3.603	3.437	3.411	5.327	8.531	7.740	7.878
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
16	MEAN	41.1	44.7	43.2	44.2	47.6	51.1	53.4	54.8	54.5	51.5	45.5	43.4	47.9
	S. D.	7.956	6.679	7.071	6.149	4.593	4.341	3.514	3.479	3.223	4.572	8.340	7.723	7.534
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
19	MEAN	40.8	44.9	42.5	43.9	46.5	50.0	52.3	54.0	53.5	51.2	45.5	43.1	47.3
	S. D.	7.114	6.331	6.964	4.729	3.960	4.043	3.414	3.315	3.369	3.593	7.481	7.187	6.967
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
22	MEAN	41.2	44.9	42.6	43.6	46.3	49.6	51.8	53.5	53.6	51.1	45.4	42.7	47.2
	S. D.	6.582	5.339	6.625	4.602	4.079	3.921	3.496	3.376	3.020	3.995	7.353	7.033	6.736
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
ALL HOURS	MEAN	40.4	44.4	42.4	43.5	46.7	50.3	52.5	54.1	54.0	51.2	45.3	42.8	47.3
	S. D.	7.472	6.312	7.063	5.873	4.514	4.272	3.556	3.422	3.174	4.581	7.922	7.343	7.389
	TOTAL OBS	1240	1128	1240	1200	1239	1200	1240	1240	1200	1240	1200	1240	14607

5706 RELATIVE HUMIDITY JAN 68

JAN
MONTH

73-77

STATION	STATION NAME
23239	ALAMEDA, CALIFORNIA

STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE	STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE
STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE	STATION NAME	STATION NO.	STATION TYPE	STATION CLASS	STATION CODE

PERIOD

**CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)**

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JAN	01	100.0	100.0	99.4	99.4	94.2	86.5	78.1	40.0	11.0	77.2	155
	04	100.0	100.0	98.7	96.1	94.2	88.4	78.1	46.5	14.8	77.8	155
	07	100.0	100.0	99.4	97.4	94.8	89.0	78.1	49.7	14.2	78.4	155
	10	100.0	100.0	98.1	96.8	89.7	80.6	60.6	29.7	12.3	72.5	155
	13	100.0	99.4	98.1	89.0	76.8	60.6	32.9	16.1	7.1	63.8	155
	16	100.0	98.7	95.5	87.7	75.5	56.8	28.4	12.3	5.8	62.0	155
	19	100.0	100.0	98.1	95.5	89.0	79.4	55.5	21.9	8.4	70.4	155
	22	100.0	99.4	99.4	98.7	96.8	89.7	72.9	32.9	10.3	76.1	155
TOTALS		100.0	99.7	98.3	95.1	88.9	78.9	60.6	31.1	10.5	72.3	1240

NAVWEASERVCOM

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FEB
MONTH

NAVWEASERVCOM

RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

PRINTED BY THE STANDARD RECORDING COMPANY, U. S. A.

23239 STATION

ALAMEDA, CALIFORNIA

73-77

PERIOD

MAR MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAR	01	100.0	100.0	99.4	99.4	98.1	85.2	69.7	32.3	9.7	75.4	155
	04	100.0	100.0	99.4	98.7	96.8	85.8	71.6	34.2	12.3	75.5	155
	07	100.0	100.0	99.4	99.4	95.5	85.2	72.3	40.6	9.7	76.2	155
	10	100.0	99.4	98.7	91.6	84.5	68.4	41.9	18.1	3.9	66.5	155
	13	100.0	100.0	96.1	85.8	69.7	43.9	25.8	10.3	1.9	58.6	155
	16	100.0	100.0	96.8	87.7	72.3	51.6	26.5	11.6	3.2	60.6	155
	19	100.0	100.0	98.7	95.5	88.4	70.3	52.9	21.3	3.9	68.8	155
	22	100.0	100.0	98.7	98.7	94.8	81.9	62.6	27.7	6.5	72.9	155
TOTALS		100.0	99.9	98.4	94.6	87.5	71.5	52.9	24.5	6.4	69.3	1240

NAVWEASERVCOM

RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

PRINTED BY THE STANDARD REGISTER COMPANY, U. S. A.

23239 ALAMEDA, CALIFORNIA 73-77 MAY

STATION NAME PERIOD MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAY	01	100.0	100.0	100.0	100.0	100.0	94.8	79.9	35.7	10.4	77.8	154
	04	100.0	100.0	100.0	100.0	99.4	95.5	82.6	34.8	9.7	78.4	155
	07	100.0	100.0	99.4	99.4	96.8	89.7	66.5	20.0	4.5	73.6	155
	10	100.0	100.0	97.4	96.1	88.4	56.8	22.6	5.2		62.4	155
	13	100.0	96.1	94.2	89.7	67.7	34.2	9.7	1.3		55.1	155
	16	100.0	98.1	96.8	91.0	80.0	43.2	16.8	3.2		58.7	155
	19	100.0	100.0	99.4	96.1	92.9	77.4	41.3	13.5	2.6	68.6	155
	22	100.0	100.0	100.0	99.4	98.7	92.9	70.3	30.3	5.8	75.8	155
TOTALS		100.0	99.3	98.4	96.5	90.5	73.1	48.7	18.0	4.1	68.8	1239

RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

JUN
MONTH

73-77

PERIOD

ALAMEDA, CALIFORNIA
STATION NAME

23239
STATION

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JUN	01	100.0	100.0	100.0	100.0	100.0	96.7	77.3	46.7	16.7	79.7	150
	04	100.0	100.0	100.0	100.0	100.0	98.0	77.3	53.3	20.0	80.9	150
	07	100.0	100.0	99.3	98.7	94.7	87.3	69.3	43.3	10.0	75.7	150
	10	100.0	98.7	97.3	92.7	82.7	64.0	38.7	14.0	.7	64.4	150
	13	100.0	94.7	92.0	84.7	66.0	43.3	16.0	6.0		55.9	150
	16	100.0	97.3	94.0	88.7	70.7	52.0	23.3	4.0	.7	58.7	150
	19	100.0	99.3	96.7	94.7	89.3	74.7	44.0	29.3	2.0	68.6	150
	22	100.0	100.0	100.0	100.0	97.3	92.7	69.3	39.3	11.3	76.7	150
TOTALS		100.0	98.8	97.4	94.9	87.6	76.1	51.9	29.5	7.7	70.1	1200

RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

PRINTED BY THE STANDARD RECORDING COMPANY, U. S. A.

23239 ALAMEDA, CALIFORNIA 73-77 JUL NORTH

STATION NAME

PERIOD

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JUL	01	100.0	100.0	100.0	100.0	100.0	99.4	89.0	54.8	21.9	82.9	155
	04	100.0	100.0	100.0	100.0	100.0	100.0	95.5	56.8	22.6	83.7	155
	07	100.0	100.0	100.0	100.0	100.0	98.1	83.9	51.0	16.8	81.2	155
	10	100.0	100.0	100.0	100.0	97.4	78.7	39.4	19.4	3.9	69.6	155
	13	100.0	100.0	97.4	93.5	78.1	47.1	12.3	3.9	1.3	59.0	155
	16	100.0	100.0	98.7	94.8	84.3	53.5	19.4	3.2	.6	61.2	155
	19	100.0	100.0	100.0	98.7	98.7	87.7	54.2	27.1	3.2	72.7	155
	22	100.0	100.0	100.0	100.0	100.0	100.0	80.6	47.7	16.1	80.8	155
TOTALS		100.0	100.0	99.5	98.4	94.8	83.1	59.3	33.2	10.8	73.9	1240

5706 RELATIVE HUMIDITY JAN 68

AUG
MONTH

73-77

ALAMEDA, CALIFORNIA
STATION NAME

23239

PERIOD

**CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)**

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
AUG	01	100.0	100.0	100.0	100.0	100.0	100.0	98.1	70.3	23.2	85.3	153
	04	100.0	100.0	100.0	100.0	100.0	100.0	98.1	69.7	28.4	85.9	153
	07	100.0	100.0	100.0	100.0	100.0	100.0	96.1	64.5	22.6	84.7	153
	10	100.0	100.0	100.0	99.4	98.1	90.3	56.8	25.2	5.8	73.0	153
	13	100.0	100.0	100.0	97.4	84.5	49.0	16.8	5.2	.6	60.8	153
	16	100.0	100.0	100.0	96.8	88.4	65.2	27.1	9.0	1.3	64.2	153
	19	100.0	100.0	100.0	100.0	98.7	96.8	74.8	46.5	11.6	78.1	153
	22	100.0	100.0	100.0	100.0	100.0	100.0	91.6	61.3	18.7	83.3	153
TOTALS		100.0	100.0	100.0	99.2	96.2	87.7	69.9	44.0	14.0	76.9	1240

RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

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23239

ALAMEDA, CALIFORNIA

STATION	STATION NAME

73-77

PERIOD

SEP

MONTH

**CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)**

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
SEP	01	100.0	100.0	100.0	100.0	100.0	100.0	95.3	74.0	20.7	84.9	150
	04	100.0	100.0	100.0	100.0	100.0	99.3	96.0	77.3	20.7	85.4	150
	07	100.0	100.0	100.0	100.0	100.0	100.0	96.0	75.3	19.3	85.2	150
	10	100.0	100.0	100.0	98.7	96.0	87.3	58.0	26.7	2.7	72.5	150
	13	100.0	99.3	95.3	92.0	81.3	56.0	17.3	2.7		59.7	150
	16	100.0	100.0	98.0	94.0	86.0	71.3	28.7	5.3	.7	64.0	150
	19	100.0	100.0	99.3	98.0	96.0	94.7	80.7	46.0	10.7	77.9	150
	22	100.0	100.0	100.0	100.0	99.3	98.0	92.7	67.3	16.0	82.9	150
TOTALS		100.0	99.9	99.1	97.8	94.8	88.3	70.6	46.8	11.6	76.6	1200

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RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

PRINTED BY THE STANDARD RECORDING COMPANY, U. S. A.

23239 ALAMEDA, CALIFORNIA

73-77

STATION NAME

PERIOD

23239

STATION

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
OCT	01	100.0	100.0	100.0	99.4	98.1	96.8	89.0	67.1	9.7	81.7	155
	04	100.0	100.0	100.0	98.7	98.1	95.5	90.3	67.7	12.3	82.4	155
	07	100.0	100.0	98.7	98.1	95.5	95.5	92.3	70.3	19.4	83.0	155
	10	100.0	100.0	97.4	96.1	92.9	80.6	44.5	13.5	2.6	68.7	155
	13	100.0	99.4	92.9	87.1	70.3	41.3	12.3	3.9	.6	56.1	155
	16	100.0	99.4	96.1	91.6	79.4	56.8	19.4	3.9	.6	60.1	155
	19	100.0	100.0	100.0	98.7	94.8	88.4	67.1	30.3	1.9	74.0	155
	22	100.0	100.0	100.0	98.7	97.4	94.2	83.9	49.7	4.5	79.0	155
TOTALS		100.0	99.9	98.1	96.1	90.8	80.9	62.4	38.3	6.5	73.1	1240

RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

PRINTED BY THE STANDARD RECORDING COMPANY, U. S. A.

23239 STATION ALAMEDA, CALIFORNIA 73-77 PERIOD NOV MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
NOV	01	100.0	99.3	98.7	98.0	92.7	90.7	76.0	38.7	8.0	76.1	150
	04	100.0	100.0	98.0	97.3	94.7	91.3	82.7	44.0	9.3	77.5	150
	07	100.0	100.0	98.0	97.3	96.0	90.7	80.0	44.7	10.0	77.5	150
	10	100.0	99.3	97.3	96.0	88.7	72.0	50.0	22.0	5.3	68.5	150
	13	100.0	98.0	94.7	88.7	70.0	48.7	24.7	10.0	1.3	59.6	150
	16	100.0	98.0	96.0	89.3	72.0	47.3	24.7	12.0	2.7	60.0	150
	19	100.0	100.0	98.0	96.0	92.7	76.0	50.0	18.7	4.0	69.5	150
	22	100.0	99.3	98.7	98.0	92.7	86.7	69.3	27.3	4.7	73.7	150
TOTALS		100.0	99.2	97.4	95.1	87.4	75.4	57.2	27.2	5.7	70.3	1200

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5706 RELATIVE HUMIDITY JAN 68

DEC
MONTH

PERIOD

73-77

STATION	23239	ALAMEDA, CALIFORNIA	STATION NAME
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**CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)**

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
DEC	01	100.0	100.0	99.4	98.1	97.4	91.6	81.3	47.7	16.1	79.3	155
	04	100.0	100.0	98.7	97.4	95.5	91.0	85.2	49.0	18.7	79.7	155
	07	100.0	100.0	98.1	96.1	95.5	91.6	84.5	47.1	19.4	79.6	155
	10	100.0	100.0	97.4	96.1	93.5	84.5	62.6	37.4	15.5	74.9	155
	13	100.0	99.4	96.1	90.3	82.6	62.6	42.6	18.1	5.8	65.4	155
	16	100.0	99.4	95.5	91.0	80.6	61.3	43.9	19.4	7.1	65.5	155
	19	100.0	100.0	99.4	95.5	89.7	81.9	61.3	35.5	14.2	73.4	155
	22	100.0	100.0	99.4	96.1	95.5	87.7	71.6	41.3	14.2	76.4	155
TOTALS		100.0	99.9	98.0	95.1	91.3	81.5	66.6	36.9	14.1	74.3	1240

RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

PRINTED BY THE STANDARD RECORDING COMPANY, U. S. A.

23239 STATION

ALAMEDA, CALIFORNIA

73-77

STATION NAME

PERIOD

ALL MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JAN	ALL	100.0	99.7	98.3	95.1	88.9	78.9	60.6	31.1	10.5	72.3	1240
FEB		100.0	99.9	98.9	96.5	92.1	82.7	67.1	38.0	9.0	74.4	1128
MAR		100.0	99.9	98.4	94.6	87.5	71.5	52.9	24.5	6.4	69.3	1240
APR		100.0	99.3	97.1	92.9	84.6	68.6	44.3	16.7	2.7	66.3	1200
MAY		100.0	99.3	98.4	96.5	90.5	73.1	48.7	18.0	4.1	68.8	1239
JUN		100.0	98.8	97.4	94.9	87.6	76.1	51.9	29.5	7.7	70.1	1200
JUL		100.0	100.0	99.5	98.4	94.8	83.1	59.3	33.2	10.8	73.9	1240
AUG		100.0	100.0	100.0	99.2	96.2	87.7	69.9	44.0	14.0	76.9	1240
SEP		100.0	99.9	99.1	97.8	94.8	88.3	70.6	46.8	11.6	76.6	1200
OCT		100.0	99.9	98.1	96.1	90.8	80.9	62.4	38.3	6.5	73.1	1240
NOV		100.0	99.2	97.4	95.1	87.4	75.4	57.2	27.2	5.7	70.3	1200
DEC		100.0	99.9	98.0	95.1	91.3	81.5	66.6	36.9	14.1	74.3	1240
TOTALS		100.0	99.7	98.4	96.0	90.5	79.0	59.3	32.0	8.6	72.2	14607

PERCENTAGE FREQUENCY OF AIR TEMPERATURE
VS.
WIND DIRECTION

STATION 23239 ALAMEDA, CALIFORNIA STATION NAME JAN 1973-DEC 1977 YEARS MONTH JANUARY ALL HOURS (L.S.T.)

TEMP.	NINW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122 +											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81											
72 TO 76											
67 TO 71	33.3	10.7	7.1	3.6	17.9	14.3	28.6	33.3	3.6	3	.2
62 TO 66	16.3	2.3	9.1	15.9	8.0	14.8	22.7	8.0	8.0	28	2.3
57 TO 61	18.2	1.1	3.0	13.6	8.0	13.9	17.8	9.2	33.3	33.3	27.3
52 TO 56	19.8	4.2	3.9	8.8	2.7	6.1	15.6	16.6	40.9	40.9	33.0
47 TO 51	32.8	7.1	9.6	14.0	1.9	.9	4.7	21.4	32.2	32.2	26.0
42 TO 46	30.1	19.2	13.5	15.4	7.7	1.9	1.9	23.1	52	52	4.2
37 TO 41	19.2										
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	26.5	4.8	5.6	11.9	10.6	4.5	7.5	13.5	15.2	1240	100.0

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5709 FREQ. TEMP. VS. WIND DIR. JAN. 68

PERCENTAGE FREQUENCY OF AIR TEMPERATURE VS. WIND DIRECTION

STATION NAME ALAMEDA, CALIFORNIA STATION 23239 YEARS JAN 1973-DEC 1977 MONTH FEBRUARY ALL HOURS (L.S.T.)

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81											
72 TO 76											
67 TO 71	36.4						27.3	36.4		11	1.0
62 TO 66	25.9				14.8	3.7	7.4	44.4	3.7	27	2.4
57 TO 61	18.6	3.3	1.2	7.0	19.2	6.4	23.8	18.6	1.7	172	15.2
52 TO 56	10.0	3.1	2.5	15.1	20.9	6.9	19.7	11.7	10.0	478	42.4
47 TO 51	23.5	4.2	4.0	11.4	7.9	5.8	11.6	13.0	18.5	378	33.5
42 TO 46	30.0	16.7	20.0	6.7			3.3	5.0	18.3	60	5.3
37 TO 41		50.0	50.0							2	.2
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	17.6	4.3	3.7	11.6	14.8	5.9	16.5	13.8	11.8	1126	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE VS. WIND DIRECTION

23229
STATION

ALAMEDA, CALIFORNIA
STATION NAME

JAN 1973-DEC 1977
YEARS

MARCH
MONTH

ALL
HOURS (L.S.T.)

WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81											
72 TO 76											
67 TO 71	11.1	11.1	11.1				22.2	100.0		2	.2
62 TO 66	14.0	2.0		2.0	2.0	2.0	46.0	32.0	2.0	9	.7
57 TO 61	11.9	1.4		3.8	17.6	7.6	34.8	20.5	2.4	50	4.0
52 TO 56	9.9	2.6	2.6	8.0	16.4	11.7	27.2	20.5	2.4	210	16.9
47 TO 51	15.9	3.8	6.7	7.9	7.6	6.4	24.6	19.6	5.6	463	37.3
42 TO 46	28.4	16.0	9.9	8.6	6.2		8.6	16.0	7.9	419	33.8
37 TO 41	33.3		16.7	16.7		16.7	16.7		6.2	81	6.5
32 TO 36										6	.5
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	13.6	3.6	4.1	6.9	12.2	8.0	27.0	18.9	5.6	1240	100.0

NAVWEASERVCOM

PERCENTAGE FREQUENCY OF AIR TEMPERATURE
VS.

WIND DIRECTION

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

JAN 1973-DEC 1977
YEARS

APRIL
MONTH

ALL
HOURS (L.S.T.)

WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81											
72 TO 76	8.7	4.3			8.7	4.3	30.4	100.0		2	.2
67 TO 71	14.3	2.4				4.8	40.5	43.5		23	1.9
62 TO 66	8.9					6.5	45.5	38.1		42	3.5
57 TO 61	13.5	1.6		2.4	4.1	12.3	40.9	35.0		123	10.3
52 TO 56	9.6	1.2	2.2	4.1	7.9	10.0	42.6	16.3	4.8	252	21.0
47 TO 51	10.2	1.0	2.9	5.8	10.5	12.1	29.4	13.9	6.9	418	34.8
42 TO 46	25.9		7.4	11.1	9.6	12.1	7.4	16.9	12.1	313	26.1
37 TO 41					11.1			14.8	22.2	27	2.3
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	11.0	.8	1.8	3.7	8.7	10.2	37.9	18.9	7.1	1200	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE VS. WIND DIRECTION

23229
STATION

ALAMEDA, CALIFORNIA
STATION NAME

JAN 1973-DEC 1977
YEARS

MAY

ALL

HOURS (L.S.T.)

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96	33.3						33.3	33.3		3	.2
87 TO 91	40.0						60.0			5	.4
82 TO 86	16.7						33.3	50.0		6	.5
77 TO 81	14.3					7.1	35.7	42.9		14	1.1
72 TO 76	7.4					3.7	37.0	44.4	7.4	27	2.2
67 TO 71	6.5	2.2				6.5	52.2	26.1	6.5	46	3.7
62 TO 66	2.8	.6	.6	1.1	7.9	9.6	56.5	16.9	4.0	177	14.3
57 TO 61	2.5	.3	.3	1.3	9.4	11.6	55.7	11.9	6.9	318	25.7
52 TO 56	4.5	1.2	.4	3.7	4.5	14.4	55.1	11.3	4.7	486	39.2
47 TO 51	4.5		4.5	1.9	7.7	19.9	42.3	11.5	7.7	156	12.6
42 TO 46								100.0		1	.1
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	4.3	.7	.9	2.2	6.3	12.9	52.7	14.4	5.6	1239	100.0

NAVWEASERVCOM

PERCENTAGE FREQUENCY OF AIR TEMPERATURE
VS.

WIND DIRECTION

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

JAN 1973-DEC 1977
YEARS

JUNE
MONTH

ALL
HOURS (L.S.T.)

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81											
72 TO 76											
67 TO 71											
62 TO 66											
57 TO 61											
52 TO 56											
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	3.8	.9	.3	.8	3.3	12.4	58.2	14.7	5.6	1200	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE VS. WIND DIRECTION

STATION 23239 ALAMEDA, CALIFORNIA JAN 1973-DEC 1977 MONTH JULY ALL HOURS (L.S.T.)

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122 +											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91								100.0		4	.3
82 TO 86	9.1						63.6	27.3		11	.9
77 TO 81	16.7						53.6	27.8		18	1.5
72 TO 76	2.5	2.5					47.5	37.5	2.5	40	3.2
67 TO 71	2.0				2.0	4.7	64.9	25.0	1.4	148	11.9
62 TO 66	2.6	1.0		1.0	5.3	10.2	64.1	12.8	3.0	304	24.5
57 TO 61	1.3		.2	.9	2.6	13.4	62.5	11.1	8.1	469	37.8
52 TO 56	1.6		.4	.8	3.7	28.9	49.2	8.9	6.5	246	19.8
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	2.1	.3	.2	.7	3.2	14.1	59.8	14.3	5.3	1240	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE

VS.

WIND DIRECTION

23239
STATIONALAMEDA, CALIFORNIA
STATION NAMEJAN 1973-DEC 1977
YEARSAUGUST
MONTHALL
HOURS (L.S.T.)

WIND DIRECTION

TEMP.	NINW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122 +											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91								100.0		1	.1
82 TO 86							22.2	77.8		9	.7
77 TO 81							72.7	22.7	4.5	22	1.8
72 TO 76	1.7				1.7	5.1	54.2	37.3		59	4.8
67 TO 71	1.9				3.2	6.4	62.2	23.7	2.6	156	12.6
62 TO 66	4.5	.3		2.1	2.8	8.0	60.6	16.6	5.2	289	23.3
57 TO 61	.6		.6	2.1	.9	7.9	68.1	12.8	7.0	530	42.7
52 TO 56			.6		2.3	23.0	53.4	13.2	7.5	174	14.0
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	1.6	.1	.3	1.4	1.9	9.5	62.6	17.0	5.6	1240	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE VS. WIND DIRECTION

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

JAN 1973-DEC 1977
YEARS

SEPTEMBER
MONTH

ALL
HOURS (L.S.T.)

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122 +											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91	25.0							75.0		8	.7
82 TO 86	16.7						50.0	33.3		12	1.0
77 TO 81	16.3						47.6	36.1		21	1.8
72 TO 76	23.1				3.8	3.8	36.5	32.7		52	4.3
67 TO 71	8.5	.7	.7	2.1	7.1	7.1	54.6	15.6	3.5	141	11.8
62 TO 66	5.0	1.3	.7	2.0	10.3	7.6	56.6	8.3	8.3	302	25.2
57 TO 61	3.4	.6	.8	2.5	2.7	10.8	58.2	12.9	8.0	474	39.5
52 TO 56	1.1	.5	.5	1.1	3.2	10.1	65.1	13.8	5.3	189	15.8
47 TO 51							100.0			1	.1
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LVR											
TOTALS	5.3	.7	.7	1.9	5.2	8.8	56.9	14.1	6.5	1200	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE

VS.

WIND DIRECTION

23239
STATIONALAMEDA, CALIFORNIA
STATION NAMEJAN 1973-DEC 1977
YEARSOCTOBER
MONTHALL
HOURS (L.S.T.)

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86	30.0			10.0	4.8	20.0	20.0	30.0	10.0	10	.8
77 TO 81	4.8			9.5	4.8	23.8	42.9	14.3	21	21	1.7
72 TO 76	24.1	1.7		3.4	5.2	34.5	31.0		58	58	4.7
67 TO 71	15.5	5.2	1.7	5.2	6.9	41.4	18.1	4.3	116	116	9.4
62 TO 66	13.3	4.0	1.2	3.2	10.5	29.8	16.5	8.9	248	248	20.0
57 TO 61	13.6	3.4	2.7	7.5	6.4	34.5	13.2	9.5	441	441	35.6
52 TO 56	6.8	2.4	4.1	4.7	3.5	35.0	15.0	22.1	340	340	27.4
47 TO 51	33.3	33.3					16.7	16.7	6	6	.5
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	12.4	3.1	2.7	4.8	7.3	7.4	33.9	16.3	12.0	1240	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE VS. WIND DIRECTION

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

JAN 1973-DEC 1977
YEARS

NOVEMBER
MONTH

ALL
HOURS (L.S.T.)

WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122 +											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81											
72 TO 76	60.0	20.0		10.0				10.0		10	.8
67 TO 71	33.3						30.0	33.3	3.3	30	2.5
62 TO 66	12.5	5.4	.9	.9	11.6	14.3	23.2	23.2	8.0	112	9.3
57 TO 61	13.7	5.2	1.2	8.0	18.2	7.4	17.5	16.0	10.8	325	27.1
52 TO 56	18.2	4.1	4.1	9.8	10.4	5.4	15.2	12.6	20.2	461	38.4
47 TO 51	24.0	3.2	8.1	13.1	4.1	1.4	7.7	14.5	24.0	221	18.4
42 TO 46	35.0	10.0	15.0	12.5			7.5	10.0	10.0	40	3.3
37 TO 41	100.0									1	.1
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	19.4	4.6	4.0	8.9	10.8	5.7	15.2	15.3	16.3	1200	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE

VS.

WIND DIRECTION

ALL
HOURS (L.S.T.)

DECEMBER
MONTH

JAN 1973-DEC 1977
YEARS

ALAMEDA, CALIFORNIA
STATION NAME

23229
STATION

WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122 +											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81											
72 TO 76											
67 TO 71											
62 TO 66	31.3	12.5	6.3	6.3	6.3	6.3	6.3	21.3	6.3	16	1.3
57 TO 61	15.2	2.3	1.3	6.3	13.6	10.6	19.7	22.7	7.6	132	10.6
52 TO 56	17.7	2.1	2.6	15.2	16.9	4.9	9.6	15.8	15.2	468	37.7
47 TO 51	26.4	2.2	8.7	12.5	6.3	2.2	3.3	12.3	27.9	448	36.1
42 TO 46	30.4	6.4	9.9	9.4	2.3	.6	1.2	5.8	33.9	171	13.8
37 TO 41		40.0	40.0						20.0	5	.4
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	21.8	2.9	5.8	12.5	10.5	3.9	7.2	14.0	21.5	1240	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE VS. WIND DIRECTION

23239
STATION

ALAMEDA, CALIFORNIA
STATION NAME

JAN 1973-DEC 1977
YEARS

WIND DIRECTION

ALL
MONTH

ALL
HOURS (L.S.T.)

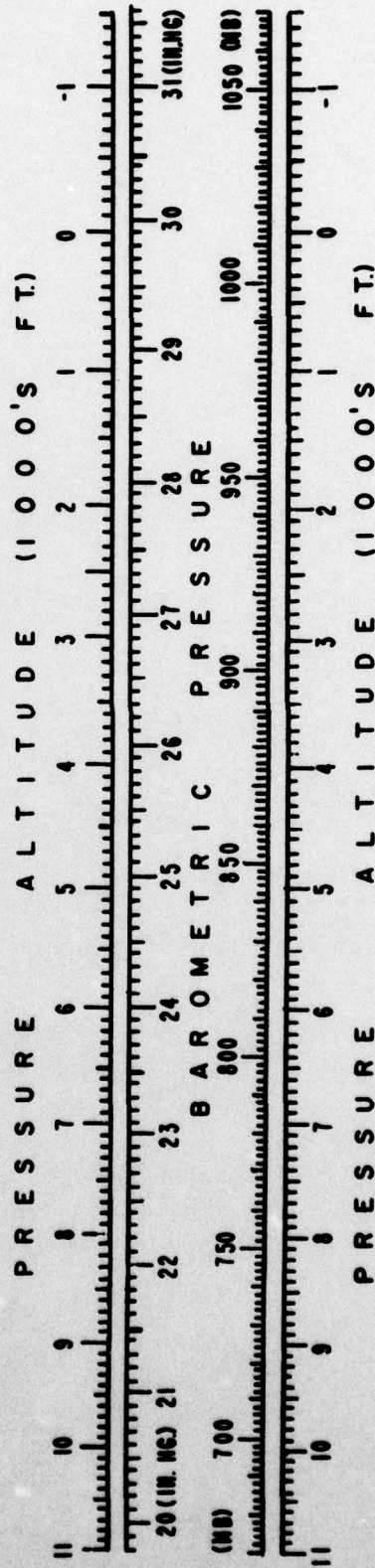
TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96	20.0					25.0	50.0	25.0		4	.0
87 TO 91	19.4					10.0	30.0	40.0		10	.1
82 TO 86	16.1					3.2	16.1	61.3		31	.2
77 TO 81	10.8	1.7			3.1		42.2	39.1	1.6	64	.4
72 TO 76	12.6	2.2			1.7	3.3	45.0	31.7	5.0	120	.8
67 TO 71	8.3	1.5			2.8	4.4	40.4	25.6	1.3	317	2.2
62 TO 66	6.9	1.5			3.2	5.7	33.1	23.8	3.2	806	5.5
57 TO 61	7.5	1.5			7.1	8.9	50.9	17.3	5.3	1929	13.2
52 TO 56	9.5	1.8			7.8	9.8	47.2	14.4	7.4	3775	25.8
47 TO 51	20.9	2.9	2.2	7.5	10.2	11.3	34.2	13.2	10.2	4428	30.3
42 TO 46	30.1	8.7	10.8	9.3	7.5	6.0	19.6	15.0	17.0	2355	16.1
37 TO 41	19.7	19.7	13.6	11.4	6.4	1.0	2.7	7.1	21.8	702	4.8
32 TO 36				16.7	6.1	1.5	3.0		19.7	66	.5
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	11.6	2.2	2.5	5.6	7.8	8.6	36.4	15.4	9.8	14607	100.0

PART F PRESSURE SUMMARY

Presented in this part are two tables giving the means, standard deviations, and total number of observations of station pressure and sea-level pressure by month and annual for the local hourly observations corresponding to the eight 3-hourly synoptic times GCT. The same computations are also provided at the bottom of the page for all hours combined. All years of data available are combined in both of these tables, although the overall period is limited to January 1946 through December 1963 because of changes in reporting practices before and after those dates.

1. Station pressure in inches of mercury.
2. Sea-level pressure in millibars.

Provided below is a scale to convert station pressure values in inches of mercury or millibars to pressure altitude in 1000's of feet. This scale is an enlarged model of the pressure altitude scale in the Smithsonian Meteorological Tables.



MEANS AND STANDARD DEVIATIONS

5707 MEANS AND STANDARD DEVIATIONS JAN 68

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STATION PRESSURE IN INCHES HG FROM HOURLY OBSERVATIONS

73-77

ALAMEDA, CALIFORNIA

29239

STATION	HRS.(L.S.T.)	STATION NAME												YEARS			
		JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL			
01	MEAN	30.114	30.097	30.018	30.022	29.958	29.915	29.927	29.930	29.924	30.000	30.075	30.113	30.007			
	S. D.	.152	.159	.146	.110	.090	.088	.072	.067	.078	.093	.125	.157	.137			
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826			
04	MEAN	30.110	30.084	30.004	30.011	29.950	29.910	29.921	29.922	29.919	29.993	30.071	30.111	30.000			
	S. D.	.155	.162	.145	.110	.089	.085	.071	.068	.076	.091	.126	.153	.137			
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826			
07	MEAN	30.118	30.096	30.023	30.036	29.975	29.934	29.946	29.949	29.944	30.014	30.088	30.121	30.020			
	S. D.	.159	.166	.149	.112	.090	.084	.071	.068	.077	.093	.128	.154	.136			
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826			
10	MEAN	30.156	30.124	30.050	30.053	29.986	29.946	29.961	29.966	29.963	30.038	30.119	30.155	30.042			
	S. D.	.160	.166	.148	.110	.091	.085	.072	.069	.077	.095	.134	.152	.140			
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826			
13	MEAN	30.110	30.095	30.025	30.030	29.970	29.935	29.949	29.946	29.935	30.000	30.073	30.108	30.014			
	S. D.	.155	.165	.144	.108	.091	.084	.072	.070	.076	.095	.130	.151	.133			
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826			
16	MEAN	30.088	30.064	29.992	29.998	29.943	29.911	29.919	29.914	29.902	29.973	30.050	30.087	29.986			
	S. D.	.152	.159	.140	.108	.090	.086	.071	.070	.077	.094	.128	.153	.132			
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826			
19	MEAN	30.096	30.072	29.995	29.995	29.939	29.903	29.911	29.907	29.902	29.982	30.061	30.096	29.988			
	S. D.	.151	.160	.140	.104	.089	.087	.070	.069	.075	.096	.130	.155	.137			
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826			
22	MEAN	30.116	30.092	30.019	30.021	29.964	29.924	29.934	29.929	29.926	30.003	30.077	30.110	30.009			
	S. D.	.148	.160	.143	.107	.089	.088	.070	.068	.076	.093	.132	.155	.136			
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826			
ALL HOURS	MEAN	30.114	30.090	30.016	30.021	29.961	29.922	29.933	29.932	29.921	30.000	30.076	30.113	30.008			
	S. D.	.155	.162	.145	.110	.091	.087	.073	.071	.079	.095	.130	.154	.137			
	TOTAL OBS	1240	1128	1240	1200	1240	1200	1240	1240	1200	1240	1200	1240	14608			

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MEANS AND STANDARD DEVIATIONS

5707 MEANS AND STANDARD DEVIATIONS JAN 68

SEA LEVEL PRESSURE IN HRS FROM HOURLY OBSERVATIONS

73-77

ALAMEDA, CALIFORNIA

23239

STATION	STATION NAME												ANNUAL
	YEARS												
HRS.(L.S.T.)	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	
01	MEAN	1020.7	1020.2	1017.5	1017.7	1015.6	1014.1	1014.5	1014.4	1016.9	1019.5	1020.7	1017.2
	S. D.	5.178	5.369	4.986	3.706	2.995	2.913	2.440	2.256	2.628	3.137	4.237	5.296
	TOTAL OBS	155	141	155	150	154	150	155	155	150	155	150	155
04	MEAN	1020.6	1019.8	1017.0	1017.3	1015.3	1013.8	1014.2	1014.3	1016.7	1019.4	1020.7	1016.9
	S. D.	5.235	5.468	4.938	3.738	3.011	2.919	2.410	2.304	2.578	3.092	4.281	5.168
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155
07	MEAN	1020.9	1020.2	1017.7	1018.1	1016.1	1014.7	1015.1	1015.2	1017.0	1019.9	1021.0	1017.6
	S. D.	5.413	5.611	5.043	3.778	3.023	2.846	2.386	2.300	2.583	3.137	4.335	5.215
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155
10	MEAN	1022.1	1021.2	1018.6	1018.7	1016.5	1015.1	1015.6	1015.6	1015.7	1018.2	1020.8	1018.4
	S. D.	5.443	5.638	5.012	3.682	3.075	2.893	2.432	2.300	2.581	3.234	4.520	5.126
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155
13	MEAN	1020.6	1020.2	1017.8	1018.0	1015.9	1014.7	1015.2	1015.1	1017.0	1019.4	1020.6	1017.4
	S. D.	5.270	5.554	4.852	3.664	3.092	2.904	2.428	2.366	2.570	3.197	4.402	5.111
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155
16	MEAN	1019.9	1019.1	1016.6	1016.8	1015.0	1013.9	1014.2	1014.0	1013.6	1016.0	1018.6	1016.5
	S. D.	5.180	5.434	4.763	3.651	3.052	2.927	2.398	2.354	2.572	3.174	4.343	5.196
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155
19	MEAN	1020.2	1019.4	1016.8	1016.8	1014.8	1013.7	1013.9	1013.6	1016.3	1019.0	1020.2	1016.5
	S. D.	5.117	5.401	4.734	3.534	3.003	2.967	2.378	2.323	2.534	3.242	4.406	5.241
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155
22	MEAN	1020.8	1020.1	1017.6	1017.7	1015.7	1014.4	1014.7	1014.6	1017.0	1019.6	1020.7	1017.2
	S. D.	5.030	5.411	4.839	3.610	3.028	2.947	2.382	2.299	2.555	3.154	4.478	5.249
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155
ALL HOURS	MEAN	1020.7	1020.0	1017.4	1017.6	1015.6	1014.3	1014.7	1014.6	1016.9	1019.5	1020.7	1017.2
	S. D.	5.256	5.500	4.919	3.709	3.070	2.944	2.461	2.388	2.650	3.225	4.406	5.225
	TOTAL OBS	1240	1128	1240	1200	1239	1200	1240	1200	1240	1200	1240	1100